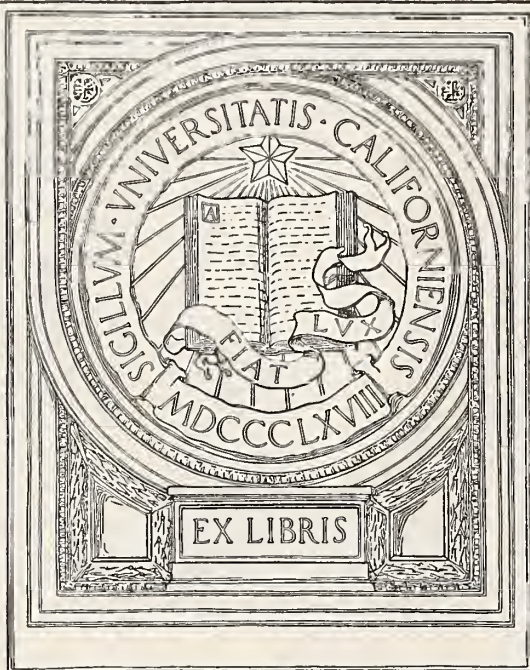


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THE SELECTION OF THE ANESTHETIC AGENT OR METHOD.*

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ROCHESTER, MINN.

The development and progress of surgery is inseparable from the advance of anesthesia, and it is to the interest of surgeons to encourage men trained in the basic sciences and in medicine to specialize in anesthesia. The administration of drugs potent enough to produce anesthesia requires more than casual supervision and, in order that the newer anesthetic agents and procedures may be properly evaluated, careful and accurate observations and records should be made during and after anesthesia. In the last year, we have inaugurated a new anesthetic study record at The Mayo Clinic. We hope, by means of it, to be able to correlate our statistics properly, and to arrive at facts concerning the various types of anesthetic agents and procedures in common use.

Experience has taught us that a satisfactory routine for use of any drug or procedure that may be selected does not exist. The choice of the anesthetic agent and method to be employed are governed by the general physical condition and temperament of the patient, the operation contemplated, the contraindications encountered, and various factors which may complicate each case.

*Read before the Section on Surgery at the Sixty-fourth Annual Session of the Mississippi State Medical Association, Jackson, May 13, 1931.

†From the Section on Anesthesia, The Mayo Clinic.

In selecting an anesthetic for a given case there is now a wide variety of procedures and agents from which to choose. It should be possible to select one that will give satisfactory results both to the surgeon and to the patient. Of the anesthetics in general use, ether, nitrous oxide, and ethylene are employed most frequently. For local anesthesia, procaine still seems to be the safest and most uniformly satisfactory. Table 1 shows the percentage of cases at The Mayo Clinic in which various agents or procedures were used alone in 1930. Table 2 represents the percentage of cases in which the various agents were used either alone or in combination with other agents.

PRELIMINARY MEDICATION.

Before the administration of an anesthetic it is almost always desirable to use sufficient preliminary medication to overcome any nervousness or apprehension that the patient may have of the anesthetic or operative procedure. This is particularly true preceding the use of some of the regional anesthetic procedures, such as cervical, paravertebral, or sacral nerve block, when it is necessary to make several needle punctures. Hypersensitive, nervous persons may experience shock from fright, without actual pain or discomfort. If such patients have had a good night's rest they approach the operation in a better mental condition, and it is easier to administer the anesthetic satisfactorily. For this purpose we have found the barbiturates, administered the evening before operation, in sufficient doses to produce sleep, to be of

benefit. A small dose may then be given the morning of operation, and this may be followed by the usual dose of morphine and atropine just prior to operation. Perhaps greater benefit is derived from the barbiturates than from sleep, in itself. It is a common observation that following the injection of procaine there may be depression, restlessness and other psychic and nervous phenomena. These symptoms of idiosyncrasy usually are not encountered when, in the preparation of the patient, the barbiturates are used. The salts of barbituric acid are efficient in detoxication of the local anesthetic agent.²

Heavy preliminary medication with morphine or with respiratory depressants is contraindicated when ether by the open-drop method is to be used. In other forms of general anesthesia by inhalation the respiratory depression may be overcome by stimulation with carbon dioxide.

ANESTHESIA BY INHALATION.

Of the anesthetic procedures available all are familiar with ether by the open-drop method. Ethyl chloride has such a narrow margin of safety that its use is seldom justified. During the narcosis produced by ethyl chloride grave symptoms of respiratory failure and collapse have developed. Artificial respiration alone is often of no avail in the endeavor to restore animation. One suddenly and unmistakably encounters the symptoms of cardiac paralysis, which prompt intracardiac injection of epinephrine, and continued artificial respiration sometimes will relieve with astonishing rapidity. But the hazard of producing general anesthesia by means of ethyl chloride is now unnecessary.

Anesthesia by inhalation is contraindicated in pyogenic infections of the mouth or upper part of the respiratory tract, due to the danger of aspiration of infectious material. Ether is contraindicated in the presence of active pulmonary disease, severe hypertension, diabetes, and severe anemia.

Many improvements have been made in gas machines, so that anesthesia with any

of the general anesthetic agents that may be required can be induced by the closed method. In anesthesia by this method, ether is not used alone, and fewer post-operative pulmonary complications seem to be induced than when it is used alone, by the open-drop method; when properly used, the closed method will give about the same percentage of satisfactory results.³

Intratracheal anesthesia, when properly induced, is probably the safest form of general anesthesia. In the last year, we have adopted Magill's technic for intratracheal anesthesia. He uses a single soft rubber tube of sufficient caliber to permit of free respiration. The tracheal end is cut at an acute angle, to facilitate passage of the tube between the vocal cords (Figs. 1 and 2). The patient's throat is sprayed with a solution of 10 per cent butyn, and anesthesia is induced with nitrous oxide and oxygen, with the addition of sufficient ether to produce relaxation. The patient's head is placed in such a position that the normal relationship of the thoracic vertebrae to the cervical vertebrae while the patient is in the erect position is maintained. The chin is slightly elevated until

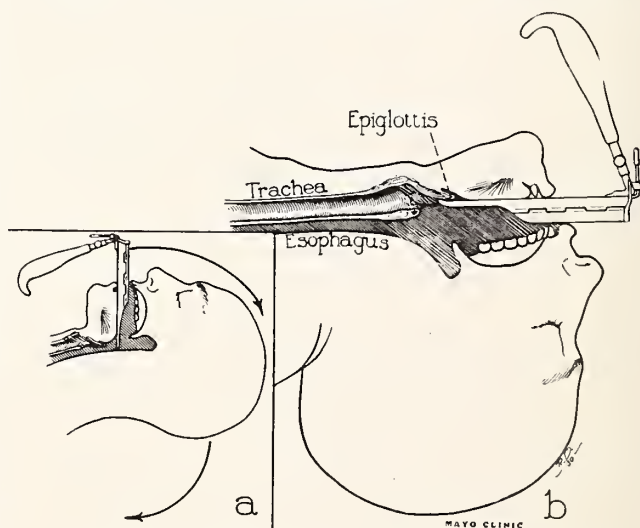


Fig. 1. a, The longitudinal axis of the oral cavity is substantially at a right angle with the longitudinal axis of the trachea. The laryngoscope is inserted until its tip touches the posterior wall of the pharynx; b, the head is rotated backward until the longitudinal axis of the oral cavity is in line with the longitudinal axis of the trachea. The epiglottis is lifted by the tip of the laryngoscope and the glottis is brought into view.

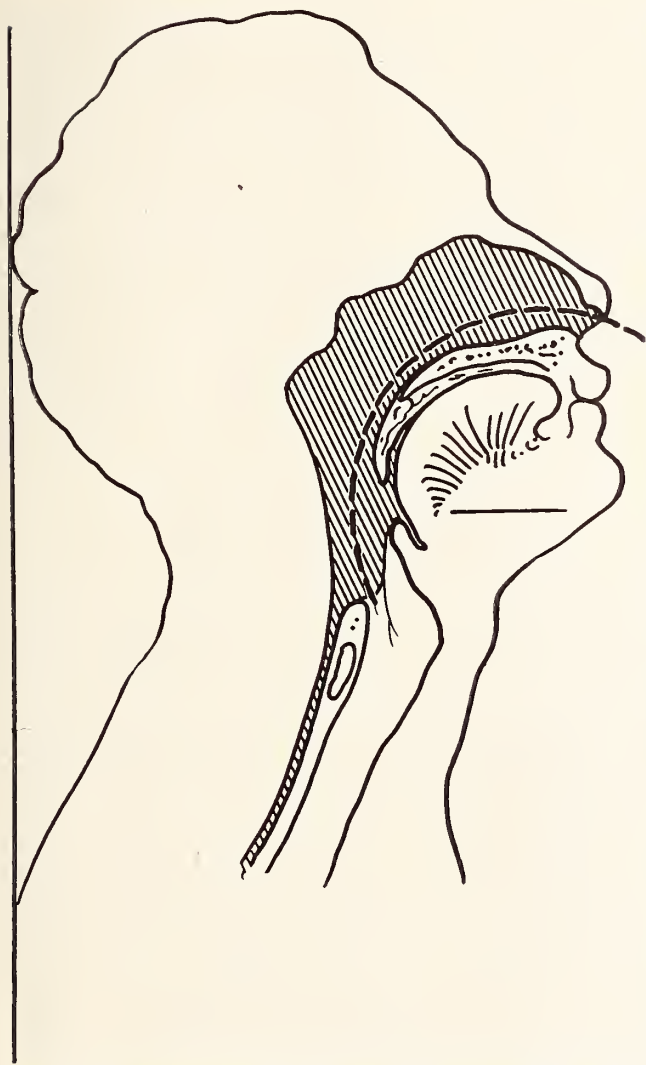


Fig. 2. Curve followed by catheter in intubation through the nose.

the line of the jaw is at right angles to the table. The catheter can be passed through the nose or mouth as desired. If it is passed through the nose, it is thrust into the pharynx, until a place is reached at which the respiratory sound is of maximal intensity. With the next inspiration, the catheter is advanced into the trachea; when this has been accomplished, a characteristic blowing sound is heard. The catheter is inserted until the tip reaches a point 3 to 4 cm. from the bifurcation of the trachea. Connection is then made to the gas machine, and anesthesia is continued as desired. In surgical procedures for lesions such as intrathoracic tumors, diaphragmatic hernias, and for certain operations around the head, this method is

best, for the anesthetist is assured of a free airway, and he has control of the depth of anesthesia at all times.

INTRAVENOUS ANESTHESIA.

Anesthesia produced by the intravenous injection will be ideal if a suitable agent is ever secured. Ether has been used intravenously to produce anesthesia, but this method requires a constant flow of physiologic solution of sodium chloride, in which ether will be in solution part of the time. In prolonged operations this might produce serious complications. Recently the barbiturates have received a great deal of attention and study from an anesthetic viewpoint. Our practical experience has been principally with sodium *iso*-amylethyl barbiturate (sodium amytal) and with sodium ethyl (1-methylbutyl) barbiturate (nembutal).

The effect of the barbiturates is the same, whether they are administered intravenously, by mouth, or by rectum, but for doses of sodium *iso*-amylethyl barbiturate of more than 10 grains (0.65 gm.), or of sodium ethyl (1-methylbutyl) barbiturate of 5 grains (0.3 gm.), the intravenous method is the safest by which to bring the patient to the desired depth of anesthesia.

The advantages of sodium barbiturates administered intravenously are: (1) induction is quiet and pleasant, (2) respirations are slow and quiet, (3) postoperative nausea and vomiting are practically eliminated, and (4) the patient sleeps for several hours after operation, with partial loss of memory of unpleasant events. The disadvantages are: (1) there may be marked fall in blood pressure, (2) delirium, edema of the lungs, inability to raise mucus, and even pneumonia, may follow large doses, (3) all patients require careful nursing until they are entirely awake and conscious, (4) in our experience catheterization has been necessary in about 25 per cent of cases after intra-abdominal operations, (5) sloughs may occur if 15 or 20 per cent solution is injected outside the vein.

The dose of sodium ethyl (1-methylbutyl) barbiturate is half that of sodium *iso*-amylethyl barbiturate, and the effects wear off in half the time. For this reason, the former is probably preferable for surgical procedures. It is apparent that, although the barbiturates at this time are the best intravenous anesthetics, their advantages are so far surpassed by their disadvantages that their use is not justified in doses large enough to produce surgical anesthesia. As preliminary medication, for their hypnotic or sedative effect, prior to some other form of anesthesia, either local or general, their use appears to rest on reasonable ground.

RECTAL OF COLONIC ANESTHESIA.

In cases in which it is not convenient to have any apparatus for anesthesia about the head this method may be of value. Ether is usually the anesthetic agent, and olive oil the vehicle. The mixture is composed of 65 per cent ether and 35 per cent olive oil. For analgesia, 50 per cent of each is sufficient. The dose is estimated as 1 fluid ounce (30 c.c.) of the mixture for each 20 pounds (9 kg.) of body weight. Severe abdominal cramps accompany the injection of olive oil and ether, and for the comfort of the patient it is desirable to precede the injection with some form of inhalation anesthesia. The patient may be expected to go through all the stages of ordinary ether anesthesia. It will be found of benefit to keep the face covered with a light towel or mask to prevent too rapid elimination of ether, and to allow a certain amount of rebreathing of the escaping ether vapor. Administration of ether by this method is frequently followed by a certain amount of colonic irritation, accompanied by rather severe cramps. Inhalation narcosis is free from the disadvantages of rectal narcosis. In the latter it is impossible to determine beforehand what is the precise dose of the anesthetic, and it is impossible to interrupt the narcosis once it has been induced. The osmotic faculty of the intestinal mucous membrane is unknown and there is no constant factor of

absorption in intestinal mucous membranes. Notwithstanding these and other disadvantages, massive oil-ether enemas may produce as safe and satisfactory anesthesia as that which follows the liberal pouring of ether on a cone intermittently. Unfortunately, ether is often unskillfully given by persons incompetent to interpret its effects, or perhaps lacking in intelligent interest. However, alternate respiratory embarrassment and return to the stage of excitement is the form of anesthesia that many surgeons at times, to their obvious disadvantage, are forced to accept.

Tribromethyl alcohol (avertin) in a 3 per cent solution, using 6 per cent gum acacia as a vehicle, injected into the rectum in a dose of 1.5 c.c. for each pound (0.5 kg.) of body weight, produces quiet, rapid, pleasant induction, without any excitement. We first used tribromethyl alcohol in an aqueous solution, but a few cases of colonic irritation followed. Since we have begun using gum acacia as a vehicle we have had no complications of this nature. It is necessary to use extreme care in the preparation of this mixture, for heating of the solution to more than 110° F. causes the formation of hydrobromic acid. The temperature of the gum acacia is determined before the tribromethyl alcohol is added and the solution is gently agitated in a water bath, the temperature of which does not exceed 110° F., until the tribromethyl alcohol is in solution. Before the solution is used, it is tested with Congo red. It should not be used unless the indicator takes on a clear, reddish color. We have used tribromethyl alcohol alone, or combined with some form of local or general anesthesia, with very satisfactory results for laminectomy in cases in which patients are apprehensive, for dissection of submental and submaxillary glands and for block dissection in the submental and submaxillary regions. Chloretone, morphine and atropine, or the barbiturates, may be used as preliminary medication before tribromethyl alcohol, but care should be used in giving mor-

phine after operation. I have seen a few cases in which there has been marked cyanosis due to respiratory depression, caused by administration of morphine before the patient was completely out from under the influence of the tribromethyl alcohol. As a sedative and hypnotic tribromethyl alcohol appears to be most useful. To produce anesthesia, the required dose usually is too high for the safety required for general use. Unwanted effects on the circulatory system may be ushered in by doses sufficient to produce narcosis.

The literature contains many articles on the use of tribromethyl alcohol. Its chief contraindications seem to be the presence of malfunction of the kidney or liver.⁴ Its chief advantage is quiet, pleasant induction for the patient. Undoubtedly its use has been accompanied by a certain element of risk which has nearly approximated that of chloroform, and its use might well be restricted to the occasional case in which other forms of anesthesia would not be satisfactory, or in which it might be used as a basic anesthetic only.

REGIONAL ANESTHESIA.

When administration of a general anesthetic is definitely contraindicated, it is possible to use some form of regional anesthesia. The successful application of regional anesthesia depends on the cooperation of the patient, and on the skill of the anesthetist and that of the operator. The cooperation of the patient may often be gained by proper preliminary medication, and careful attention to minor details in the technic of the injection, so that he is subject to a minimal amount of pain and discomfort during the procedure. For convenience, the procedures available under regional anesthesia have been grouped under three headings: (1) spinal anesthesia, (2) nerve block and field block singly or combined, and (3) infiltration. Infiltration is well understood and will not be taken up here.

Spinal anesthesia.—For surgical procedures below the diaphragm spinal anesthesia offers a satisfactory method. In the

presence of active pulmonary tuberculosis, or diabetes, or in diseases of the kidney, it is undoubtedly the safest anesthetic procedure available. Statistics show that the use of spinal anesthesia is accompanied by a certain element of risk. Its use should be limited to those cases in which a general anesthetic is contraindicated, or to cases in which the extreme muscular relaxation that accompanies it would facilitate the work of the surgeon and would tend to lessen the surgical mortality. It would be justifiable to accept an increased risk from anesthesia if the ultimate mortality rate might be lowered. For major operations below the diaphragm there has been claimed for this method a lower mortality rate than when general anesthesia has been employed. For senile patients especially, the prognosis is often improved when spinal anesthesia is to be used. That degree of analgesia which produces muscular relaxation, and which is indispensable to abdominal and pelvic surgery is, by this method, assured. From the patient's viewpoint, the advantages are many. The post-operative motor restlessness, the nausea, the vomiting, the tympanites, and the complications affecting the kidneys and the lungs are reduced, and this makes convalescence less eventful, which is eminently desirable.

Reliable statistics seem to indicate a mortality of 1 in 1000 in the use of spinal anesthesia.¹ If anesthesia extends above the diaphragm, mortality probably will be relatively high, and if anesthesia extends only to lower segments, relatively low. I feel, however, that the mortality should be judged by the mortality for the type of operation performed, and that the mortality in a large series of cases in which spinal anesthesia is used should be compared with that in a series of similar operations performed under some other form of anesthesia.

In the technic which we have used, preliminary medication to suit the individual requirements of the patient is employed. Just prior to injection of the procaine,

ephedrine sulphate, grain $\frac{3}{4}$, is administered subcutaneously. It is safer and easier to maintain the arterial tension by giving the ephedrine prior to the injection of propaine, than it is to cause elevation of the tension after it has fallen.

The extent cephalad of the anesthesia is regulated by the site of injection, the amount of fluid injected, the rate of injection, and caliber of the needle used. The effects of the first three of these factors are well known. It is not so generally known that a given amount of the solution forced through a small needle in a given time, will diffuse more rapidly than if the same amount of the same solution is forced through a large needle in the same time. The force of the stream that passes through the small needle is greater. The duration of anesthesia is determined by the amount of procaine used. If the rate of injection is standardized, one can develop one's own technic as to the site of injection and amount of fluid necessary to obtain anesthesia for the desired operation (table 3). The blood pressure should be taken before the administration of the spinal anesthetic and about every five minutes following, until the operation is completed. If a severe drop in arterial tension occurs, ephedrine or epinephrine may be used to elevate it at any time. After the injection the patient should be moved carefully and the head should be kept level with the feet or lower, as in the Trendelenburg position, until the anesthesia has worn off.

The contraindications to spinal anesthesia are: (1) involvement of the central nervous system by syphilis or by a tumor of the brain or spinal cord; (2) local pathologic processes at the site of injection; (3) extremes in blood pressure, either high or low, and (4) a condition of shock due to hemorrhage.

The complications which I have observed are: (1) headache lasting from a few days to several weeks, (2) diplopia, (3) foot drop, and (4) stiff neck. These conditions have all cleared up later. The common

causes of death from this form of anesthesia are respiratory and vasomotor paralysis. By the use of accurate doses, and a proper technic of administration, a fatal outcome is forestalled. Should cyanosis due to insufficient respiratory excursion occur, artificial respiration should at once be resorted to, and intravenous injections of fluid made with the patient in the Trendelenburg position. The blood pressure should most carefully be watched and the warning of danger should be heeded,

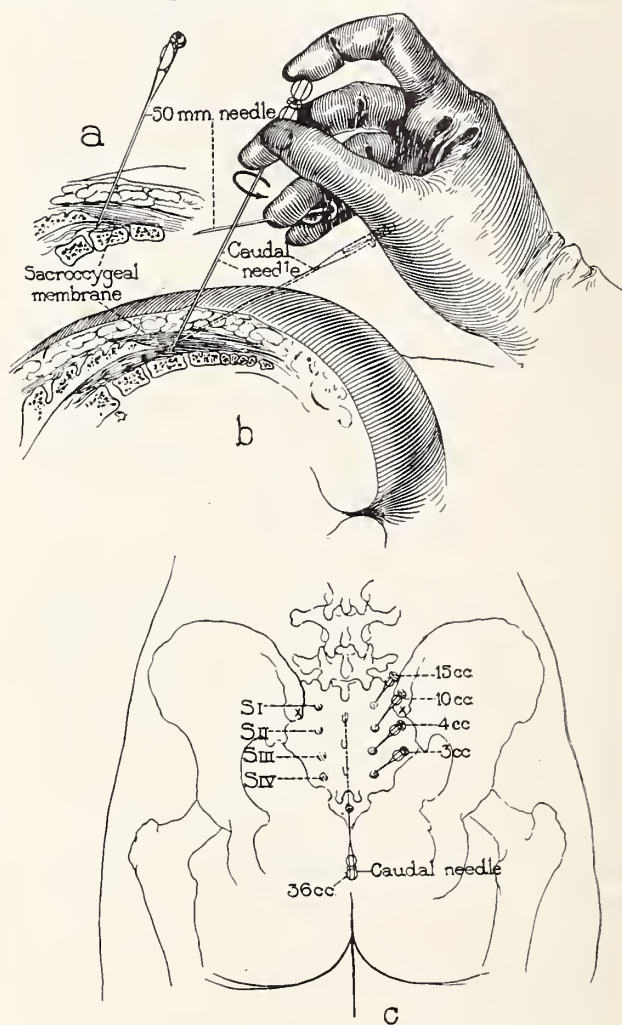


Fig. 3. a, A 50-mm. needle is inserted through a wheal over the sacrococcygeal membrane into the tip of the caudal canal and 5 c.c. of solution injected to make the insertion of the caudal needle painless; b, the 50-mm. needle is withdrawn and the caudal needle inserted in its stead and advanced into the caudal canal, after being rotated so that the bevel rests on bone; c, dorsal view of sacrum with caudal needle in position as well as those in SI, SII, SIII, and SIV (the first, second, third and fourth sacral foramin). A total of 36 c.c. of solution is placed in the caudal canal in the average case.

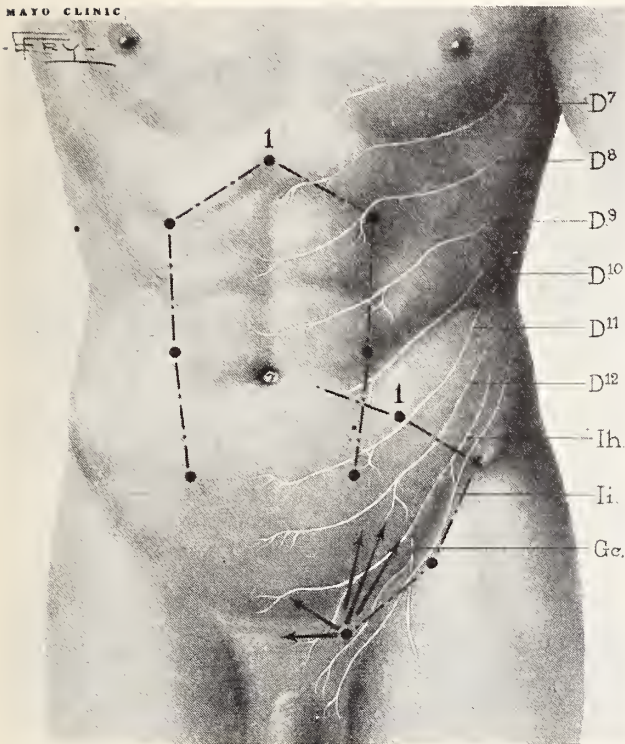


Fig. 4. Abdominal field block and inguinal hernia block; the dots represent site of puncture and the broken lines subcutaneous infiltration.

when a marked drop in arterial tension occurs.

Nerve block and field block.—By blocking the nerves at a point proximal to the site of operation, satisfactory anesthesia and relaxation may be obtained. This method has the advantage of keeping the local anesthetic solution out of the operative field and the healing of the wound is not interrupted.

Of the various procedures which are used as a routine, transsacral, or a combination of transsacral and abdominal field block, is used most frequently. Numerous operations can be performed satisfactorily under transsacral block anesthesia, such as perineorrhaphy, amputation of the cervix, hemorrhoidectomy, posterior resection of the rectum, perineal prostatectomy, cystoscopic examination, and circumcision. Under combined transsacral (fig. 3) and abdominal (fig. 4) block, suprapubic prostatectomy, diverticulectomy, cystostomy, and removal of tumors of the bladder may be performed satisfactorily.

By blocking the second, third and fourth cervical nerves at the point of their emerg-

ence, and supplementing this with a superficial injection down the posterior border of the sternocleidomastoid muscle, satisfactory anesthesia can be obtained for surgical procedures on the neck, including laryngectomy, esophageal diverticulectomy, thyroidec-tomy, and dissections of the submaxillary glands (fig. 5).

Block of the brachial plexus by the supra-clavicular route (fig. 6) furnishes satisfactory anesthesia and relaxation for any operation on the upper extremity below the shoulder, and is of particular advantage for transplantation of tendons because the patient is able to co-operate and to flex the hand or fingers as required.

Paravertebral block (fig. 7) is most satisfactory for operations on the vertebral column or spinal cord from the cervical to the lumbar region. Field block consists in creating walls of anesthesia encircling the operative field. The solution is distributed in such a manner as to reach all of the

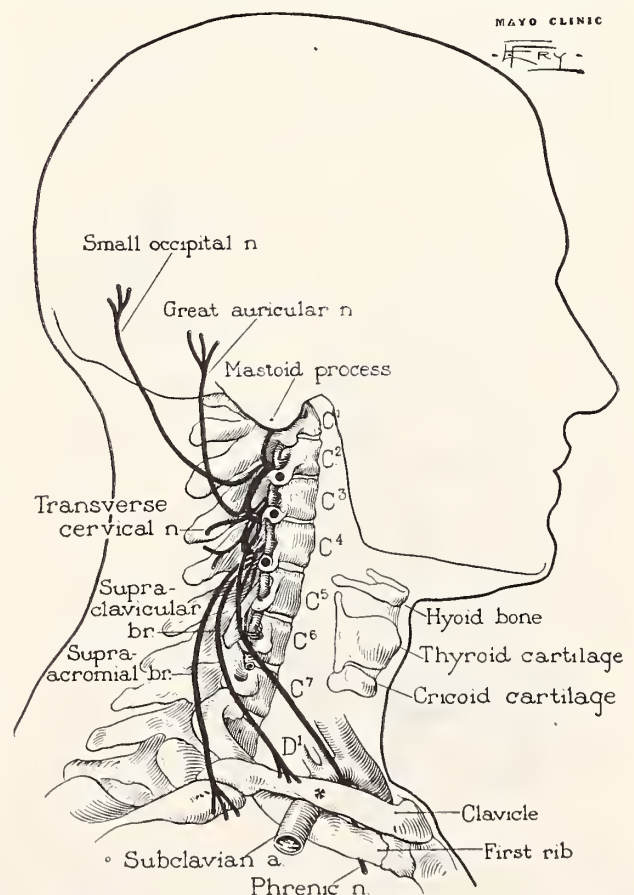


Fig. 5. Cervical plexus in relation to transverse processes and vertebral blood vessels.

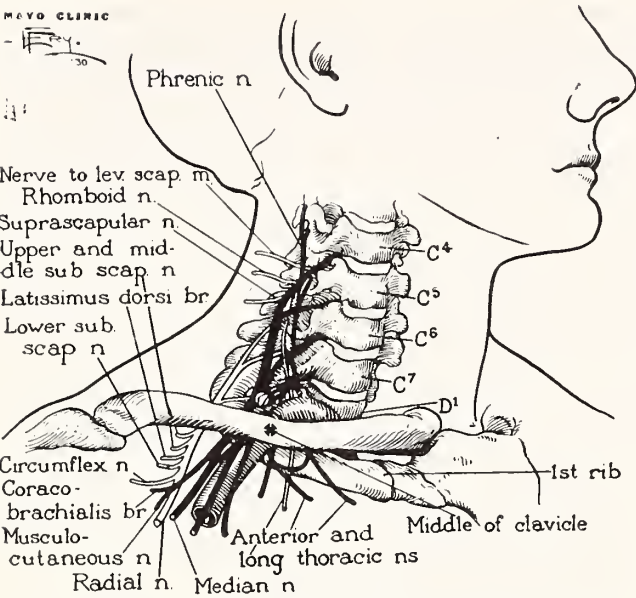


Fig. 6. Brachial plexus block; brachial plexus in relation to subclavian artery, first rib, and middle of the clavicle. The white circle is the site of injection 1cm. above the middle of the clavicle.

nerves which enter the region of operation. This procedure can be applied to any surface of the body, but its field of greatest clinical usefulness is in producing anesthesia if the scalp for craniotomy and for anesthetizing the abdominal wall for intra-abdominal exploration (usually combined

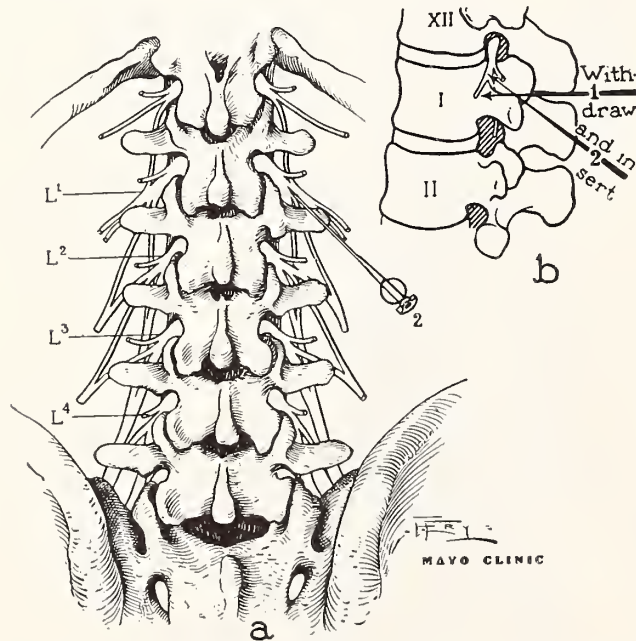


Fig. 7. Paravertebral block, a, lumbar nerves in relation to the spine; b, needle is first inserted at right angles to the skin until it makes contact with transverse process; it is then withdrawn (1) and passed upward and inward (2).

with gas), repair of umbilical and ventral hernia, and for inguinal herniotomy.

THE ESSENTIAL IN ALL ANESTHESIA.

In selecting an anesthetic agent or method there must be guaranteed to the patient the greatest possible measure of safety. To this end, the technic employed, the doses of drugs used, the psychologic factors influencing the patient, all must be fully taken into consideration, for therein lies success or failure. An earnest desire to produce results of advantage to the patient is the foundation of success in the method employed.

TABLE 1.

Agents and methods used in anesthesia in 1930*.	
Agent or method	Per cent
Local anesthesia (spinal anesthesia excluded)	37.2
Spinal anesthesia	9.3
Ether	7.09
Gases	3.06
Barbiturates	0.11
Avertin	0.091
Oil-ether colonic	0.005

*In compiling the figures for this table only those cases were included in which the agent or method named was the only one used; that is, unless otherwise stated; therefore, the percentages do not add to 100.

TABLE 2.

Agents of special interest used in anesthesia in 1930*.	
Agents	Per cent
Local, including spinal anesthetic agents	58.4
Ether	37.6
Ethylene	26.3
Nitrous oxide	37.3
Carbon dioxide**	43.7
Ethyl chloride	0.15
Acetylene	0.06
Barbiturates	2.71
Tribromethyl alcohol	0.23

*In compiling this table, all cases were included in which the agents named were used, whether alone or in combination with other agents; the percentages, therefore, add to more than 100.

**Used only as a respiratory stimulant.

TABLE 3.

Dosage and dilution of procaine in spinal anesthesia*.

Operation	Injection between lumbar vertebra	Dosage of procaine, mg.	Amount of spinal fluid, c.c.
Amputation of leg....	3 & 4	100-120	3
Prostatectomy	3 & 4	100-120	3.5
Hernia (inguinal)	3 & 4	120-150	3.5
Appendectomy	2 & 3	120-150	4
Colostomy	2 & 3	120-150	5
Hysterectomy	2 & 3	150-200	5
On gallbladder.....	1 & 2	150-200	5
On stomach	1 & 2	200-250	6

*Spinal needle gauge 20-22; rate of injection, 0.25 c.c. for each second.

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SIMPLIFIED "LIGATION" IN TREATMENT OF THE APPENDECTOMY STUMP—RESULTS IN FIVE HUNDRED CASES.

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In the light of present day surgical knowledge and improved surgical technic, we are prone to write at length and discuss whenever and wherever the occasion arises the many intricate, delicate, and less common surgical operations and to pass too casually over the more common and yet least discussed procedures.

From the time Ephriham McDowell performed his first laparotomy abdominal surgery began to assume its rightful place

in the medical world. Operations were devised by the skillful. They were studied and made better by the masters of surgery. They were considered at that particular time as being so nearly perfect that no further improvement would be made in that particular line of surgery. But such was not the case. Advanced ideas as to operative technic and operative sterility entirely revolutionized the then modern surgery. Our present day Surgery is no different. Who knows but that time will completely revolutionize at least many of our ideas, especially our collective and inherited ideas as to surgical technic.

The literature dwells at length on the subject of Appendectomy and with only a few exceptions the operative technic is practically the same. The older and more experienced surgeons advocate inverting the stump of the appendix. It is true that a surgeon will follow closely the method he has always used in any given operation provided of course, that method offers what is considered a low mortality and low morbidity rate and a good man using even obsolete methods carefully might keep his rates down. There are many good men now using methods which are obsolete in the eyes of modern Surgery yet they will not be changed because their results with these methods are not bad.

The ideal method of performing any operation is that method by which the patient can be most safely and expeditiously relieved of his suffering in the shortest length of time and with a minimal amount of trauma. It has been said that "In Germany there are no minor operations." I believe we could certainly apply the same statement to this country in so far as complicating an otherwise simple operation, namely, "Appendectomy."

At the present time there are essentially two methods of performing an appendectomy:

- (1). Removal without inversion stump
- (2). Removal with inversion of stump

The simplified technic of removing the appendix as described below, in my opinion, is the one operation which without a doubt meets all the listed surgical requirements. The procedure is very simple and can be done very easily and more quickly on any appendix, regardless of the condition, than any of the other operations now being done on this particular organ.

On opening the peritoneal cavity the index finger gently and carefully picks up the lower caecum as a guide. With gentle traction the appendix is now freed of any adhesions and carefully elevated. A blunt tip forcep carrying a No. 2 plain catgut suture is passed through the base of the meso-appendix at the appendico-cecal junction. This suture is then securely tied including the entire meso-appendix in the tie. The appendix is then separated from its mesentery keeping close to the body of the appendix as far down as the base of the caecum. Two crushing forceps are now placed about the base of the appendix about $\frac{1}{4}$ inch apart. The lower forcep is immediately removed and a literature of No. 2 plain catgut is securely fastened around the base of the crushed area. As a precautionary measure, and not that it is at all necessary, a second tie is likewise placed on the cecal side of the stump just far enough from the first tie to be secure in itself. The appendix is now severed between the forcep and the tie. The stump is cauterized with carbolic acid, neutralized with alcohol, and then allowed to fall back into the abdominal cavity.

The procedure as noted is very simple and can be done in a minimal amount of time.

In this series of five hundred cases so operated, including gangrenous, acute, sub-acute, and chronic cases, only one case of paralytic ileus developed. The percentage of cases requiring post-operative gastric lavage was greatly decreased. There was no evidence of any increased or secondary peritoneal involvement, no hidden nor remote abnormal temperature during con-

valesence, and no evidence of even a minor hemorrhage in this series of cases. The stumps in one hundred of these cases were treated with tincture of iodine alone. These results were, so far as I was able to determine, identical. In the entire series there were eleven fecal fistulae which closed spontaneously not later than the 17th post-operative day. These were fistulae occurring in the far advanced gangrenous cases and were more welcomed than alarming.

The advantages in this simplified "ligation" method are:

- (1). Rapidity and ease of performance
- (2). Easy adaptability to all cases
- (3). Smaller percentage of fecal fistulae
- (4). Lessened gas pains: due to
- (5). Lessened trauma
- (6). Absence of paralytic ileus due to lessen trauma
- (7). Elimination of all possibility of hemorrhage around stump of appendix

Thus we have an operation in which the advantages are plainly manifold. While a series of five hundred cases is not large it is a sufficient number to make evident the results thereof. The procedure is not original with me. It is supposed to have originated with Dr. John Wyeth though the literature does not mention him as making universal use of the procedure.

John J. Maloney reports a series of 3500 cases so operated upon. Maloney says that in his series the time saved alone in each operation where the stump was not inverted averaged at least 10 minutes. This however, is not nearly so important as the lessened trauma, the elimination of possibility of closed infection, or the danger of hemorrhage which occasionally results following the use of the purse string suture, and last the greatly lessened number of cases of paralytic ileus.

The main theory as advanced against the use of this method was that "Mucosa would

not unite with mucosa." Seelig showed that such condition would most certainly exist. Sellig also demonstrated that the constricting ligature caused a pushing back of the mucosa when tied so that "Serosa is actually brought into contact with serosa," causing firm healing.

The customary and usual appendectomy with so called inversion of the stump is apparently unphysiological. Instead of a pure physiological inversion of the stump the operation being done is in reality a burying of the stump. Logically this is poor surgery as we invite a closed infection or a certain amount of connective tissue which must undergo pressure anemia and ultimate necrosis. Many operations to hide the stump of the appendix have been advocated, some even going so far as to invert the entire appendix. The literature along this line by Deaver, Mayo, Elsbey, Judd and others is very prolific. It is needless to say that the preponderance of opinion of the surgical profession at this particular time seems to be in favor of the closed methods, however, there is much doubt in my mind that were these same men to try the simpler procedure and note the end results, the facility and unhampered speed with which the operation can be done, many would forsake the older methods they are now employing and turn to the easier and simpler procedure.

It is evident that in this procedure we have an operation meeting all requirements, namely, the patient is safely and expeditiously relieved of his suffering with a minimal amount of trauma and a lessened opportunity for post-operative sequelae.

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THE RABBIT OVULATION TEST IN THE DIAGNOSIS OF PREGNANCY.*

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and

J. A. LANFORD, M. D.‡

NEW ORLEANS.

The diagnosis of pregnancy in the vast majority of instances presents no difficulty, and in the doubtful early case a wait of a few weeks will settle the question. But not infrequently complicating factors are present, the matter cannot be settled by clinical observations alone, and temporizing until the positive signs are manifest is out of the question. Many tests have been devised in the past, but all have been found to be more or less unreliable, and hence of no real value. Recently, however, several new tests have been developed, which are in the nature of by-products of the epoch-making researches of Frank, Allen and Doisy, and others.

A brief review of these recent discoveries is necessary in order to understand the principles underlying these tests. Theelin, a hormone developed by the ovarian follicle, carries the endometrium through the first stages of the menstrual cycle. Its most striking reaction in lower animals is hypertrophy of the generative tract. Progestin, elaborated by the corpus luteum, is responsible for the completion of the cycle. But these hormones are developed only under the influence of the hormones of the anterior portion of the pituitary body. One of these, Prolan A, stimulates the follicle to produce its hormone, while another, Prolan B, causes the corpus luteum to elaborate progestin. These pituitary hormones are normally present in small amounts in the circulating blood

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of every woman. In pregnancy, however, all these hormones are produced in much greater quantities, and they are cast off in the urine in appreciable amounts. It appears that Prolan A is stable in the urine, hence the urine of a pregnant woman contains considerable amounts of this follicle-stimulating hormone, which is the basis of the Ascheim-Zondek test, and of the various modifications.

Siddall¹ first proposed a biological test for pregnancy, based on the presence of theelin in the blood stream. One c.c. of the patient's blood serum is injected subcutaneously into an immature virgin white mouse once daily for four or five days. The animal is killed, and the weight in milligrams is determined. The theelin causes hypertrophy of the whole generative tract. The uterus and ovaries are dissected out en bloc and are weighed. The total weight is divided by that of the uterus plus ovaries; if the ratio is below 400 the test is considered to be positive for pregnancy, while if it is over 400 the reaction is classed as negative. Mice weighing over 18 to 20 grams cannot be used, as the ratios do not hold good for these larger animals. Forty-five cases were reported in this preliminary paper. Of 18 non-pregnant patients (five of them males) all reacted negatively. One patient giving a negative test was clinically pregnant. In 25 positive tests the patients were positively pregnant clinically, while another positive result was obtained in a patient delivered the day before the test was made. Thus in only one instance was the result in error. In a later report of 97 tests, there were 7 wrong results, 4 false positive readings and 3 false negatives.

Mazer and Hoffman² employ the vaginal smear method, injecting urine into castrated white mice, and recording a positive diagnosis if the smear contains only squamous epithelium cells, chiefly or entirely of the non-nucleated variety. The test seems to be very accurate, provided that the smears are correctly interpreted.

Acute inflammatory lesions of the pelvic organs give a high percentage of positive readings, hence this method cannot be used when ectopic pregnancy (suspected) is to be differentiated from such lesions.

Ascheim and Zondek,³ in 1928, found that if immature female mice are injected with the urine of a pregnant woman, ovulation will be caused, and the characteristic changes will be manifest on macroscopic examination of the ovaries, on autopsy at the end of one hundred hours. In this test four to six mice are used, and daily injections of the urine are administered. The results in the hands of the originators have been 95 to 98 per cent accurate, and these results have been abundantly confirmed by other investigators. However, there are several factors which serve to detract from the usefulness of the test. First, it is essential that immature female mice, not over twenty-one days old and weighing not more than six to eight grams, be used. It is often very difficult to be sure of the sex of these small animals. Secondly, the urine is at times toxic to the mice, so that the entire batch dies, and it is necessary to repeat the test. Thirdly, the fact that four days are required for the completion of the test renders it valueless when information is urgently desired, as for example in suspected ectopic pregnancy. To overcome these objections, Schneider,⁴ repeating the work of Friedman,⁵ has employed young female rabbits not over twelve to fourteen weeks old. The rabbit has the peculiarity of ovulating only after copulation, hence Schneider felt that young female rabbits that had never copulated, would be ideal for the test. Still more recently, Friedman and Lapham,⁶ have shown that older rabbits, even parous ones, may be used as well, provided they have not copulated for four or five weeks. The test is complete at the end of eighteen to twenty-four hours, and this fact is one of its chief advantages.

The technic is as follows: Ten c.c. of the filtered urine (it is not necessary to sterilize it) is injected into the ear vein

of the rabbit (Wilson states that this urine need not be fresh, as he has found it to contain the hormone after being in the ice-box for several weeks). Eighteen to twenty-four hours later the rabbit is killed and autopsied, or the ovaries may be inspected by laparotomy, thus avoiding the sacrifice of the animals. If the test is positive, the ovaries are studded with hemorrhage follicles of varying size, which appears as bright red elevated areas, easily recognizable macroscopically. Wilson⁶ states that the follicles must be ruptured in order for the test to be considered positive.

The chief advantages of this modification are its simplicity and rapidity. It seems to be a little more expensive than the Ascheim-Zondek method, as the rabbits cost about \$1.50 each, as compared with a figure of 15 to 25 cents for the mice (about \$1.00 for each test). Again, it is necessary for the rabbits to be isolated for three or four weeks, which means expense for care and feeding. It is not necessary to isolate the mice, and the feed bill is practically nil. It has been estimated that the rabbit test costs the laboratory about \$5.00, while the original Ascheim-Zondek costs about \$1.50.

What results have been secured? Schneider, in his preliminary report of 100 tests, found that in every instance the result tallied with the clinical findings. It was positive as early as eighteen to twenty days after conception; *i. e.*, the reaction was obtained in these women before the expected menstrual period had failed to materialize. It was positive in the early puerperium, becoming negative in a few days. Wilson⁷ in 200 tests, found it uniformly accurate. It is interesting to note that he found it negative in cases of missed abortion (*i. e.*, where fetal death has occurred, but the product of conception has not been expelled), but that it was nearly always positive in cases of intrauterine fetal death at or near term. Examination of the placentas from these patients, however, showed areas of living tissue, which was

not found in the specimens from the cases of missed abortion. Hence he concludes that the test is positive whenever living fetal tissue is in contact with the maternal blood stream. Heany⁸ reports a case in which the diagnosis of unruptured tubal pregnancy was confirmed by this test, and was verified at operation. Friedman and Lapham⁶ state that the laboratory diagnosis by their method has agreed with the ultimate clinical diagnosis in each of the 92 cases for which they were able to secure adequate data; a few patients could not be satisfactorily checked. Curtis⁹ obtained a positive result in a patient with hydatid mole. In this connection, it is interesting to note that Mack and Catherwood¹⁰ report positive results with the Ascheim-Zondek test in cases of hydatid mole and of chorioepithelioma, and suggest its use in following cases of mole to determine when the uterus is entirely empty, and also to detect beginning malignancy, should it later develop.

Our experience with the test is limited to a few cases, but we have come to place great reliance upon it. In one instance, subserous myoma as large as a fetal head was diagnosed in a young woman of 28, but pregnancy was suspected because of a slight softening of the cervix, in spite of a normal menstrual history. The test was negative, and this result was verified at operation. In another patient, aged 39 years, with one child 16 years old, the picture was obscured by myomata of the uterus, an atypical and irregular menstrual history, and the reluctance of the patient to believe herself pregnant because of the contraceptive measure habitually employed. The test was positive, and the subsequent history and findings have established the diagnosis of pregnancy.

We must bear in mind, however, that the Ascheim-Zondek test and these various modifications, including this most interesting one of Friedman's, have been developed only recently, and that further experience may show that they are not so accurate as they have thus far appeared to be. If, on

the other hand, their dependability is substantiated, we will have at our disposal an easy and accurate diagnostic aid, which will no doubt become a routine laboratory procedure. It is easy to imagine many conditions in which such a test will be invaluable, *e. g.*, in differentiating between pregnancy and neoplasm, or in diagnosing pregnancy plus neoplasm, in some cases of ectopic pregnancy, etc. It is to be hoped that this simple and easy procedure will prove to be as accurate as it now appears to be.

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DISCUSSION.

Dr. Hilliard E. Miller: As early as 1901 attention was called to the possible relationship between the influences that the pituitary gland might have on the development of sex organs. It was not until 1908 or 1909 that the operation of excision of the pituitary was developed and it was proven conclusively that the sex organs did not develop in animals when the pituitary gland had been extirpated. Following this work, someone attempted to feed pituitary extract to animals from which the pituitary gland had been removed, and it manifested no influence at all on the development of the sexual organs. The next procedure was that of the injection of extract of pituitary glands, which was remarkable in that these cases had superovulation where the extract had been

injected into the ovary. The cells in these cases showed very pronounced red cells.

It remained for Ingalls and Smith to do some actual transplantation in these cases. They transplanted pituitary glands in animals from which the pituitary had been extirpated. In these cases there was manifested in the sexual organs normal growth, normal follicular development in the ovary and at the same time development of the hormone of the ovary which gave rise to changes in the uterus and vagina. As far as we have been able to prove the pituitary gland has an activating influence on the follicle of the ovary. When the ovary is thoroughly developed the ovary makes its own hormone. This hormone has to do with the development of the uterus and the vaginal changes. As a matter of fact, only recently have workers attempted to show that there are two different hormones from the pituitary glands: one the growth hormone, and secondly, the sex maturing hormone. During the growth of the individual, this growth hormone neutralizes or holds in abeyance the pituitary hormone with an influence on the ovary.

Ascheim-Zondek transplanted other glands to show that the pituitary alone had this influence on the ovary. This pituitary hormone, very shortly after conception, begins to increase in the urine up to where it is estimated between three to five thousand units in each 6 cc. of urine, through the first four months. In the latter period of pregnancy this hormone is greatly diminished, until at the end of eight or nine days after delivery, the urine is entirely free of it.

The changes found in the ovary are: first, the development of the follicles of the ovary, which are very decidedly enlarged. The most important changes, as Dr. Lanford called attention to, are the hemorrhage into these follicles and the development of corpus luteum.

This test would be extremely interesting in cases operated on for chorionepithelioma. I operated upon two in the last year. If you have negative tests, or a series of negative test, you should feel with a fair degree of certainty that the result is indicative that the malignancy is completely eradicated.

I believe the greatest importance which this test will bear in clinical work is for differential purposes, in all cases where we have been undecided as to whether the uterus is pregnant or not, and in some cases where we have had in the past to open the uterus to see whether it is pregnant. In cases of abortion it will certainly be of great assistance to us. However, if the test is done within 8 or 10 days after the abortion is supposed to have occurred, we are apt to be misled.

Dr. Isidore Cohn: I might seem out of place as a surgeon discussing an obstetrical matter.

In the American Journal of Cancer for April, 1931, at the Memorial Hospital, New York City, Ferguson, Downes, Ellis and Nicholson reviewed the literature on this subject and the work of Aschheim-Zondek. The latter collected 55 cases of genital carcinoma, and of the 55 cases 45 showed positive Aschheim-Zondek test.

Dr. Miller has mentioned chorionepithelioma, and one of their particular purposes in studying the test was to try to find out how much value the test would be in differentiating malignant and benign conditions by the test. They tried the Aschheim-Zondek test in 98 cases, and in the benign condition nothing was found, but in extragenital carcinoma of women they found 4 positive cases. Others have reported like results.

While we are all getting enthusiastic about the test, we may as well look the facts in the face. There is danger of getting too enthusiastic. Some of these women we think pregnant may have genital carcinoma.

Dr. John A. Lanford (closing): Most of us in the medical profession are desirous of finding some one test that will lessen the amount of time in studying our cases for diagnosis. This test is an example of a time-saver and is likely to be abused as it offers the clinician an opportunity to have a rabbit injected with the urine of a suspected case of pregnancy without first thoroughly studying the patient from the clinical standpoint. The value of most laboratory tests should be considered as only another evidence of a particular disease and only in a few instances do the laboratory findings make the diagnosis. The laboratory findings should always be correlated with the clinical findings in order to more surely arrive at the correct diagnosis and the result of the rabbit test should be correlated with the clinical findings before a diagnosis of the presence or absence of pregnancy is reached.

Dr. E. L. King (closing): In answer to Dr. Cohn, I would say that the matter is still too recent to be dogmatic about it. All this has been true of the history of other tests. Of course, further work remains to be done.

The question of malignancy is rather interesting and each case would be settled on its own merits. I might say that in one of the articles on the rabbit test, to which I referred in the paper, it is definitely stated that the test is negative in malignancy. Why this method should thus differ from the Aschheim-Zondek test I cannot say. However, if we can find these tests, or any modification of them, to be as valuable as they appear to be now, and can rule out extraneous conditions, they certainly will be of great value in many instances.

I might mention that only recently in the past few months, two normal pregnant uteri, removed at operation in one of the local hospitals, have been turned over to the Department of Anatomy at Tulane. It certainly would appear some such test would be of value. It still requires a considerable amount of study to evaluate the test, but at present it seems to be a definite step forward. The main feature of the test is the simplicity of performance.

THE SIGNIFICANCE OF SPLENOMEGALY.*

ISIDORE COHN, M. D.,

NEW ORLEANS.

If one finds an enlarged spleen during the course of his physical examination the proper interpretation of its significance may result in the adoption of a course of treatment which may be spectacular in its beneficial effects. Splenectomy for splenomegaly is untenable. Lest we become too enthusiastic in our approach to the problem of surgery where splenomegaly exists we must remember the fact that operation will be beneficial directly as the spleen is the seat of the greatest disturbance in the disease entity. Differential diagnosis is essential. Laboratory data are of the greatest value; without these accurate diagnosis is not possible.

Splenomegaly results from a great variety of individual causes. These may be included under four general groups: (1) infections, (2) tumors, (3) blood dyscrasias, and (4) disturbance of the whole reticulo-endothelial system. This system, it should be remembered, is wide spread throughout the body and is supposed to provide the normal balance between the blood making and destroying organs.

Of the many conditions which give rise to splenomegaly there are only a few from which beneficial results may be expected to follow splenectomy. It has been demonstrated, both experimentally and by clinical experience that removal of the enlarged

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spleen for a pathological condition is followed by: (1) a rise in the red cell count; (2) an increase in the resistance of the red cells to hypotonic salt solution; (3) lessened tendency to jaundice; (4) cessation of spontaneous hemorrhages; (5) an increase in the platelet count, a return to the normal bleeding time, and, a retractile blood clot; (6) a proliferation of the endothelial cells in lymph glands and in the liver, and a reddening of the bone marrow; (7) there is less blood in the portal circulation. When we consider the clinical syndrome in a particular case it is wise to consider whether any one of the above conditions will be the desired outcome of the operative procedure.

Splenomegaly is often associated with fever, repeated hemorrhages, polycythemia, jaundice, and lymph gland enlargement. Splenomegaly when associated with fever demands differentiation for the elimination of malaria, typhoid fever, Hodgkin's disease, acute myelogenous leukemia, acute splenic anemia, undulant fever, and some of the tropical diseases, such as kala-azar and bilharziasis. In the group of splenomegalies associated with marked febrile reaction surgery is rarely indicated. Differential diagnosis in some of these cases is extremely difficult and the course of the case may even approach a fatal termination without a diagnosis being made. The blood picture may change rapidly and add to the confusion.

Splenomegaly in association with glandular enlargement may be due to Hodgkin's disease, lymphatic leukemia, tuberculosis and lues. This group rarely calls for surgery. I do not think that any one today would consider surgery directed toward the spleen in either Hodgkin's disease or leukemia. Occasionally it may be indicated in syphilis or tuberculosis because of the presence of an extremely large spleen, which, in the case of syphilis, does not respond to treatment. Tuberculosis of the spleen is associated with a clinical and hematological picture similar to polycythemia vera. The error of confusing one disease with the other has lead to the

removal of the spleen in such cases. Where the diagnosis of tuberculosis has been correct recovery has resulted; other cases have resulted fatally.

Splenomegaly in association with repeated hemorrhages may be caused by true purpura and purpura simplex, hemophilia, splenic anemia, hemolytic jaundice, pernicious anemia, and polycythemia vera. As surgeons we are concerned mostly with a group of diseases in which anemia, jaundice or repeated hemorrhages are the outstanding phenomena. More than seventy-five per cent of all splenectomies (other than for traumatic conditions) are done for splenic anemia, hemolytic jaundice and purpura hemorrhagica. A few years ago primary pernicious anemia was considered surgical in the sense that splenectomy plus transfusion seemed to increase the life expectancy. Since the introduction of the liver diet by Minot and his associates splenectomy is no longer mentioned in connection with this fatal type of anemia.

SPLenic ANEMIA.

Splenic anemia is a disease the etiology of which is unknown. Any form of treatment, therefore, must be based on theoretical considerations and clinical experience. A brief review of the clinical syndrome, which we recognize as splenic anemia, may not be out of place.

This disease is characterized by splenomegaly, weakness, progressive secondary anemia, low color index and leukopenia. The red cells retain their normal shape. Nucleated red cells are rarely seen and the fragility of the red corpuscles is not increased. The coagulation and bleeding time are normal and the platelet count is not disturbed. Jaundice is rare. At times there are hemorrhages which may be severe and occasionally prove fatal. The most severe hemorrhages are uterine; however, purpura, epistaxis, hematemesis, melena, and hematuria are seen. In the later stages of the disease the liver is enlarged and there is an associated ascites.

Differential diagnosis is essential. The low color index, the absence of nucleated

red cells and the retention by the red cells of their normal size and shape differentiate this clinical picture from pernicious anemia in which we have a progressive anemia, a high color index, nucleated red and marked changes in the size and shape of the cells. The absence of jaundice and the absence of increased fragility aid in differentiating splenic anemia from hemolytic jaundice. While it is true that splenic anemia is associated with hemorrhages, which at times are alarming, the laboratory data relatively early differentiate it from purpura hemorrhagica. In splenic anemia the coagulation and bleeding time are normal and the platelets are unaffected, whereas, in purpura the bleeding time is prolonged, the platelets diminished and the clot is non-retractile.

Mention has been made of the fact that since we do not know the etiology of splenic anemia treatment must be based on theoretical considerations and clinical experience. Clinical experience of such authorities as Wilkie, Lord Moynihan, Mayo, Bunting, Pool, Stillman, Hanrahan and others indicate that splenectomy is the treatment of choice. Our own experience certainly bears testimony to the splendid results which may be expected from splenectomy. Hanrahan has called attention particularly to the fact that there is a normal balance between hematopoietic and hematocatatonic function. It is obvious that there is an uncompensated disturbance of this blood balance in splenic anemia.

The reticulo-endothelial system, of which the spleen is a part, is supposed to be that system which provides the normal balance between the blood making and the blood destroying organs. The presence of splenomegaly points to some involvement of the spleen. Removal of a hyperactive spleen is followed by a rise in the red cell count and a diminution in the blood content of the portal circulation. Even though that organ may not be the primarily diseased organ it is an agent of destruction, hence we may expect the essential cause of the disease to be rendered ineffective by splenectomy. In

this expectancy one is not disappointed.

Following splenectomy I think one may confidently expect good results in early cases of Banti's disease or splenic anemia, and may even obtain excellent results where cirrhosis and ascites are already present since the removal of the diseased spleen diminishes the quantity of circulating blood through the already engorged diseased liver.

HEMOLYTIC JAUNDICE.

The patient who presents himself with painless jaundice affords immediately the interesting problem of differentiation between hemolytic jaundice and a jaundice due to an obstruction by compression, usually associated with malignancy. Hemolytic jaundice is characterized by splenomegaly, the presence of coloring matter in the stool and the absence of bile pigment in the urine. In the painless jaundice due to a carcinoma obstructing the duct there is a persistent absence of bile from the stool and duodenal contents. This distinction should be carefully noted in such cases. Examination of the blood, however, reveals the diagnostic characteristics of hemolytic jaundice. There is an increased fragility of the red cells and an anemia which at times is so great that it almost presents a picture of pernicious anemia. It should be remembered, as Whipple has pointed out, that this type of jaundice is the result of excessive red cell destruction followed by the formation of an amount of bile pigment which is beyond the power of the liver to excrete. We know that splenectomy is followed by an increased resistance of the red cells to destruction, therefore, there will be less opportunity for the formation of bile pigments, hence there should be less jaundice.

Since these things are facts splenectomy should be a specific antidote for a disease where the hypersplenism is associated with destruction of the red cells, increased pigment formation and increased fragility of the red cells. All authorities have agreed that the diagnosis once made indicates

splenectomy after proper pre-operative preparation of the patient.

PURPURA HEMORRHAGICA.

One of the most spectacular developments in modern medicine has been the recognition of the fact that purpura hemorrhagica, one of the dreaded hemorrhagic diseases, has been proven to be curable by splenectomy. This development is largely the result of the work of Duke, Kaznelson and Frank. The brilliant work of Brill and Rosenthal did much to popularize this method of treatment in our country.

This disease is characterized by varying degrees of splenic enlargement, hemorrhage from the mucous membrane and under the skin, marked anemia, prolonged bleeding time, normal coagulation, a non-retractile clot and a diminution in the platelets in the circulating blood. The outstanding characteristic is the diminution of the platelet count. The diminution is due to the destruction of the platelets by the spleen and other members of the reticulo-endothelial system.

It is not necessary at this time to go into the origin of the platelets and other theoretical considerations because this has been done many times. The natural question, however, which arises, is "Why should splenectomy be done?" Kaznelson has tersely concluded: "We must look upon the spleen tumor as the expression of an intensified function of the spleen, leading especially to the conclusion that blood platelets are being destroyed in larger number than was normal." Since we know that the platelets are the only formed element which have to do with coagulation their destruction by the spleen diminishes thromboplastic substances, and hence, we have a prolonged bleeding time and a non-retractile clot. There is nothing more spectacular than to see a patient who has had large subcutaneous hemorrhages cease to have these hemorrhages following splenectomy. These patients rarely have recurrences of hemorrhages after splenectomy. It should not be overlooked, however, that some of the other

hemorrhagic diseases, such as purpura simplex and hemophilia do not respond in a like manner. Further, it should be remembered that sera and calcium salt will not be effective in controlling hemorrhages in cases of purpura. I believe that transfusion and splenectomy are specific in this disease. Much more could be said with reference to it, but the essential points, which will save many of these otherwise hopeless cases, are differential diagnosis, greater cooperation between the laboratory and the clinician, and an early operation.

POLYCYTHEMIA.

This disease is included in the discussion not primarily because of the desire to discuss a rare disease, but because the citation of an individual case which went unsuspected for a long period of time, due to omissions and then an error in judgment lead to an early fatal outcome of the case. The original errors were the result of omissions. The physicians first consulted did not resort to the simplest forms of laboratory data which might at least have given them a lead. The error in judgment was the operation.

Briefly, the patient was a male, aged 57 years, who had for a few months complained of dizziness, marked weakness, and digestive disturbances which would come on at any time irrespective of the food intake. He gave a history of having had hemorrhages from the nose, stomach and bowel. He had been treated for myocarditis and for ulcer of the stomach. So far as available information was concerned a complete blood picture had not been made. It was through the courtesy of Dr. I. I. Lemann that I saw this patient after he had completely worked up the case.

The outstanding points which we had to consider were the recurring gastrointestinal hemorrhages, headaches, dizziness, the enlarged spleen, polycythemia, and leukocytosis, polynuclear in character. In this instance the question arose whether we were dealing with a true polycythemia or a polycythemia of unknown origin. It

was my impression that we were dealing with a polycythemia of unknown origin, possibly of tuberculous origin, and on that basis I advised splenectomy. The case proved to be a polycythemia vera and the outcome was fatal.

In view of the fact that this and many other similar cases go untreated for long periods of time it might be well to give a resumé of some of the outstanding symptoms of this disease. It is a slowly progressive chronic disease associated with an extremely large spleen, marked weakness, a peculiar flush of the skin (apparently a much deeper red than normal) which is especially noticeable about the face and hands. In the later stages there are hemorrhages which may be intestinal, cerebral and even in the extremities. This syndrome is extremely important because of the difficulties encountered in arriving at a correct diagnosis. One of the conditions with which it is often confused, tuberculosis of the spleen, is benefitted by splenectomy. In polycythemia vera because of uncompensated activities on the part of the hemotopoetic system, splenectomy is not indicated.

Many of the other conditions which give rise to splenomegaly might be discussed, but that would unduly prolong the paper.

CONCLUSIONS.

Personal experience with a group of cases in which splenomegaly was a prominent manifestation has impressed me with the fact that there are several outstanding points which should be of great practical value:

(1) Splenomegalies associated with acute febrile reaction are rarely benefitted by splenectomy.

(2) Splenomegalies associated with glandular enlargements (Hodgkin's disease, lymphatic leukemia, tuberculosis and lues) are not to be considered as surgical cases.

(3) Gastric hemorrhages are often allowed to cloud the issue and an unwarranted conclusion is arrived at that the disease is primarily in the stomach when

in reality it may be secondary either to the engorgement of the portal circulation in the case of polycythemia or late Banti's disease and pernicious anemia.

(4) Secondary anemias are often treated without reference to the etiologic factors. If these cases are thoroughly investigated probably more early splenic anemias would be brought to light and earlier surgical intervention will offer the patient more hope for an eventual recovery.

(5) Hemorrhagic purpura is curable in a spectacular way by splenectomy.

(6) Serums and calcium salts are of no value in the treatment of true purpura.

(7) Splenectomy is not to be considered primarily as the treatment for splenomegalies.

(8) Splenomegaly in some instances is the result of diseases which are curable by splenectomy.

SUBPHRENIC ABSCESS: A CLINICAL STUDY.*

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SHREVEPORT, LA.

Localized supuration beneath and in more or less intimate contact with the diaphragm usually termed subphrenic or sub-diaphragmatic abscess offers to the internist, the surgeon, and the radiologist a most difficult diagnostic problem. Mistakes are frequent and seemingly justifiable. On the other hand, cases are frequently diagnosed too late before operative interference, and when surgical drainage is finally resorted to the patient is so toxic that the treatment is to no avail.

Insidious in onset, this condition may present a symptomatology so varied and misleading that definite diagnosis is at times impossible and can only be made with certainty by operation or at autopsy. During the past few years this subject has been studied extensively, much has been written, and as a result earlier recognition has been possible. Despite this and the

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development of better operative technic, the mortality has not been correspondingly lowered. According to Moynihan we should expect about 16 per cent mortality. Lockwood's statistics from the Mayo Clinic gave a mortality of 33.3 per cent in 81 operated cases, with a mortality of 97 per cent in 32 unoperated cases. Deaver reports 20 cases in 2,400 consecutive cases of appendicitis. Eisendrath reports 106 cases, six occurring on the left side, and resulting from appendicitis.

To properly understand the formation of subphrenic abscess, and from the standpoint of operation, in order to determine the best method of approach for drainage, some knowledge of the anatomy of the subphrenic spaces is necessary. Ochsner and Nather devised the following classification on the cadaver which they believe conform to most cases clinically. They consider a subphrenic abscess a localized inflammatory process in one of the spaces located between the diaphragm above and the transverse colon below.

This area is divided by the liver into an infra and a supra-hepatic portion. The supra-hepatic space is located between the diaphragm above and the superior surface of the liver below. It is again divided into a right and left space by the falciform or suspensory ligament, the lower free edges of which is the round ligament which continues to the umbilicus. The coronary ligament, which is the reflection of the peritoneum from the under surface of the diaphragm onto the superior surface of the liver, divides the right superior space into an anterior and a posterior. The left prolongation of the coronary ligament which is known as the triangular ligament, or left lateral ligament, passes backward to lie at the posterior edge of the left lateral lobe, so that on the left side there is only an anterior superior space. The right prolongation, or the right lateral ligament, passes somewhat anteriorly, dividing the right superior space into a large anterior and a small posterior space. The

retroperitoneal space consists of that area inclosed within the limits of the coronary ligament, and is in contact with those portions of the liver and diaphragm which are not covered with peritoneum. The infra-hepatic space, which is that located between the liver above and the transverse colon below, is divided into a right and left inferior space by the round ligament and the ligament of the ductum venosus. The left inferior space is again divided into an anterior and posterior space by the lesser omentum in the lesser peritoneal cavity, and that lying anteriorly is known as the left anterior inferior space.

Abscesses in the right subphrenic space usually originate from the following: Abscess of the liver (amebic or from an ordinary pus infection), the kidney, diseases of the gall-bladder and ducts, or from duodenal ulcer. It is very probable that metastatic abscesses with subsequent rupture into the subphrenic spaces are much more common than hematogenous infection. The right space connects fully with other fossae and particularly, by way of the right lumbar groove, lying between the ascending colon and loin, with the appendiceal and pelvic regions. As a consequence, appendicitis is a common, if not the most common etiological factor and most of the abscess resulting from appendicitis occur on the right side. The left subphrenic space is in relation with the following organs: The spleen, left lobe of liver, cardiac end and posterior wall of stomach, left kidney, adrenal and tail of the pancreas. Lesions of these organs, therefore, may by perforation or extension result in abscesses of this space, often called perigastric or perisplenic.

Among the most common causes appendicitis, ruptured peptic ulcer, and infection of the liver or gall bladder predominate. Gravity, no doubt, plays a part in the selection of the space for localization of the abscess, thus, if for any reason fluid accumulates in the peritoneal cavity, either before or after operation and the patient

is not in a sitting position, the fluid will tend to gravitate to the subphrenic space instead of flowing down into the pelvis.

Extension of intra-thoracic suppuration through the diaphragm to cause a subphrenic abscess is a rare occurrence and is probably expained by the fact that the current of lymph which flows through the diaphragm is ascending and not descending. Focal infection is mentioned as a cause and though cases have been sighted as apparently due to carbuncles, cellulitis, or dental infection, this mode of infection is the exception rather than the rule. Abscesses apparently occur spontaneously at times. Ochsner makes the statement that there are many cases of subphrenic inflammation which go on to resolution and do not give rise to the symptoms and signs of a subphrenic abscess.

Various organisms have been found, the colon bacillus being present in the majority of cases. The gas present in about one-third of the cases is usually the result of bacterial action, and discovered in cases of long standing; however, rupture of a hollow viscus is occasionally responsible. In most cases a history suggesting appendicitis, a ruptured peptic ulcer, or gall bladder disease can be obtained. The onset of the abscess may be acute or insidious; more often it is the latter; however, case No. 2 illustrates the suddenness of abscess formation following an operation for appendicitis. Most cases follow an operation for an acute abdominal condition. It has been aptly suggested to suspect subphrenic abscess in all post operative cases that are not doing well.

The history is all important, especially in the long standing cases when the diagnosis may be exceedingly difficult. They usually look and feel sick, fever, chills and sweats are significant. The temperature is as a rule variable, at times septic, suggesting pus under tension. Pain over the lower right chest is usually complained of and quite frequently right shoulder pain due to phrenic nerve irritation is also complained of. Shortness of

breath and difficult breathing vary with the amount of secondary lung involvement. Coughing with productive expectoration occurs only after rupture into the lung.

The physical signs are as variable as the symptoms. In the early stages no local signs are discovered unless carefully searched for. The motion of the chest on the affected side is usually limited, due to fixation of the diaphragm. In abscesses occurring on the right side and not containing air the upper level of liver dullness is frequently increased and if careful percussion is practiced will frequently give a clue to a correct diagnosis. Friction sounds are often heard at the base of lung posteriorly due to involvement of the pleura. As the accumulation beneath the diaphragm increases signs of lung compression appear and the upper border of liver dullness increases. As a result of this encroachment a dull note is present over the base of the right lung and extending up to angle of the scapula. There is also present diminished voice and respiratory sounds and frequently rales. These findings are frequently mistaken for a primary pulmonary or pleural involvement and as a result a correct diagnosis is not infrequently overlooked. The abscess may finally rupture into the pleural space producing an empyema, or into a bronchus resulting at times in a spontaneous cure.

Probably the most valuable single diagnostic aid aside from history is the roentgen ray and the fluoroscope. A dome like elevation of the diaphragm into the thorax with a limitation of the diaphragmatic excursion on breathing and an acute costo-phrenic angle in the absence of lung involvement is always suggestive of a subphrenic abscess. When, however, the abscess is complicated by pleural effusion or empyema it is impossible to separate the shadows and the diagnosis must be made in conjunction with other methods. A point of value in differentiating subphrenic abscess from pleural effusion is the fact that in the former the heart is not displaced laterally. In gas containing abscesses a pocket of air

will show on the plate and if the patient is fluoroscoped in a standing or lateral position a fluid level can be made out.

Exploratory puncture, while somewhat dangerous, should be resorted to when in doubt. A negative puncture does not rule out the presence of an abscess and should be repeated if the symptoms and signs warrant same.

Within the past few years a series of 12 cases have been observed by the writer. The following case reports represent interesting types from the standpoint of etiology, symptomatology and diagnosis:

CASE REPORTS.

Case 1. C. E. E., white male, aged 31 years, presented himself in February, 1924 with the following complaint: Loss of 24 pounds in the past year, considerable digestive disturbance with flatulency after meals, and soreness in the right hypochondriac region with these attacks. Later he complained of soreness along the right costal margin and felt as if he had fever at times. There was no history of dysentery. He was denied entrance into the U. S. army in 1917 due to an enlarged liver. Prior to this time he had spent several years in the tropics. In 1918 he had osteomyelitis of the lower maxilla, and again in 1921 of the left wrist joint. He was undernourished, slightly jaundiced, temperature 100° F. There was dullness at the base of the right lung extending up to angle of the scapula. The voice and respiratory sounds were diminished. The liver edge was palpable about four fingers' breadth below costal margin, being very firm and tender to pressure. The radiographic examination of the chest revealed lung fields negative, right diaphragm considerably elevated, but the outlines were smooth and regular. The total leukocyte count was 14,000, polynuclear-neutrophils 65 per cent. With the history of several years in the tropics, rejection from military service on account of enlarged liver, and the present physical findings of enlarged liver, mild jaundice, leukocytosis, and fever, an amebic hepatitis was seriously considered. A liver abscess with extension into the subphrenic space was also thought of. Daily injections of emetine hydrochloride were begun. Three weeks later the following notation was made: He has undergone considerable improvement within past three weeks, gaining ten pounds, feels much stronger, and color considerably improved. Examination of abdomen shows an appreciable reduction in size of the liver, being palpated about two and one-half fingers' breadth below costal marking. He was advised to

continue with the emetine and a restricted diet. Twenty-four days later patient stated that he felt better than he had in five years. He continued to gain in weight and strength. The fever subsided and the leukocyte count returned to normal. As the patient was working in a neighboring state he would not remain for further observation, however, he was impressed with the importance of periodic courses of emetine. He returned 13 months later and was admitted to the hospital with the following history: Gained steadily in weight and was feeling unusually well for a period of eight months when he developed hemorrhoids which bled profusely. He began having fever, rigors, and sweats, with rapid loss in weight. Emetine had not been continued as instructed and he had imbibed freely of alcohol. He was markedly emaciated, deeply jaundiced and septic in appearance. The liver edge was palpable four fingers' breadth below costal margin, moderately firm and painless. There was dullness at the base of the right lung with a harsh friction sound present. Rectal examination revealed protruding and infected hemorrhoids. The radiographic examination showed marked elevation of the right diaphragm, with an air bubble beneath, and considerable enlargement of the liver shadow. Aspiration in the seventh interspace in the anterior axillary line revealed thick yellow pus. Rib resection was done with drainage of large quantity of foul smelling pus, culture positive for *staphylococcus aureus*. Repeated smears were negative for ameba. A few days following operation he passed copious amounts of pus and blood by rectum indicating that an abscess had ruptured into the bowel. The abscess cavity was irrigated daily with 1 to 50,000 emetine solution and in addition emetine was given hypodermatically. Four months after the operation a bulging was discovered over the brim of the right pelvis. An incision was made with drainage of thick pus. The ileum was found to be denuded of periosteum and direct scrapings from the ileum showed for the first time the presence of vegetative amebae. His progress was steady from this time on and recovery complete within six months from time of admission to hospital.

Comment:—This case illustrates the extreme chronicity of an amebic infection of the liver and the importance of frequent search for the ameba. It further illustrates the power of regeneration of the liver cells, as at least half of the liver tissue was destroyed by the multiple abscesses. Had he continued the emetine as prescribed, suppuration of the liver tissue with abscess formation would probably have been avoided. In view of the fact that ameba *histolytica* have been found in cases of osteomyelitis, the conclu-

sion is warranted that they were the inciting factor in the two instances of osteomyelitis as mentioned in the history of this case.

Case No. 2. O. S., white female, aged 14 years, admitted to hospital with diagnosis of acute appendicitis, with history of recurring similar attacks for four years. Total leukocyte count on admission was 12,000, polynuclear-neutrophils 72 per cent. A sub-acutely inflamed appendix which was bound down by dense adhesions was removed, the other abdominal organs apparently normal. On the fifth post-operative day patient was quite uncomfortable due to nausea and rise in temperature. Two days later she had the appearance of being quite sick, temperature from 99° to 103°, respiration rapid and she complained of pain in right lower chest. Examination of chest revealed lack of expansion over right lower lung field with impairment of percussion note and suppression of voice and respiratory sounds. The following day the breathing was bronchial in character with increased dullness at right base. Five days later, which was the thirteenth post operative day, this notation was made. "The fever continues, dullness to flatness persists below angle right scapula with diminished voice and respiratory sounds. The patient complains of tenderness in lower right intercostal spaces in anterior axillary line." These symptoms and findings are suggestive of pleural involvement or sub-diaphragmatic accumulation. Radiographic examination showed some congestion about the right hilus, the right diaphragm lying high, smooth, and regular. With the negative chest findings, a high leukocyte count, and the toxic appearance of the patient, and the marked elevation of diaphragm, a diagnosis of subphrenic abscess was made. Aspiration revealed thick pus. Resection of the eighth rib in mid-axillary line revealed a large amount of colonic smelling pus. Smears and cultures showed pure growth of bacillus coli. The patient made an uneventful recovery.

Comment: This case illustrates that a mild attack of sub-acute appendicitis can lead to a large subphrenic accumulation within the short period of a few days. The presenting symptoms and signs could have been easily confused with a pulmonary complication, had the probability of a subphrenic accumulation not been kept foremost in mind. The radiographic examination in this case proved indispensable to a correct diagnosis. The route of this infection was very likely via the lymphatics.

Case 3.—R. B. N., white male, aged 50 years, was admitted to the hospital with the following complaint: Cramping pain in the epigastrium for the past two days. There had been no nausea or vomiting. He gave a fairly typical history of a chronic duodenal ulcer with the additional statement that at intervals for several years he had

passed tarry stools. There was board-like rigidity of the entire abdomen, but more marked over the right side, with acute pain on pressure. The leukocyte count was 14,000 with 81 per cent polynuclear-neutrophils. It was very difficult to decide between a ruptured appendix, a ruptured peptic ulcer, or an acute gall bladder; but the typical history of a chronic duodenal ulcer was in favor of a ruptured viscus. He responded nicely to treatment and within a few days' time his temperature was normal. Several days later he passed a large quantity of dark blood. On the eighth day all pain, distention, and rigidity had subsided and three days later on account of his insistence he was permitted to go home, with instructions to return for further observation a month later. Instead, he returned one year later in a very emaciated and toxic state with the following additional history: After his return home he gained weight and strength gradually but several weeks later began running low grade fever and complaining of pain in his right side causing a leaning toward same. Five months from date of discharge he began having a daily fever. He grew rapidly worse and finally went to a hospital near his home. He remained there several weeks, during most of this time in a state of delirium as related by his wife. He suddenly began to expectorate large amounts of foul smelling pus, followed within a few days by improvement. On returning home he continued having fever, lost weight rapidly and finally decided to return to Shreveport. Physical examination indicated pathology in lower right chest as there was limited expansion over the base with numerous rales and a friction rub. However with the history of the perforating ulcer and fever of long duration, a subphrenic abscess was immediately suspected. The radiographic examination revealed opacity, irregular in outline at base of right lung field with obliteration of diaphragm. Radiological conclusion: Subphrenic abscess with rupture into lung. Patient was expectorating large amounts of foul smelling pus. Total leukocyte count 11,800, polynuclear-neutrophils 83 per cent. Following resection of rib and drainage of both the subphrenic space and the pleural cavity, he made a slow but complete recovery.

Comment: This case illustrates the difficulty in diagnosing a subphrenic accumulation unless the condition is kept foremost in mind, where a prolonged low grade fever persists following a perforating ulcer. The infection was probably via the lesser peritoneal cavity to the right subphrenic space.

Case 4.—C. W. K., white male, aged 38 years. Admitted to hospital with the following complaint: Recurrent attacks of nausea and vomiting for the past five months. About two weeks

before admission he was suddenly seized during the night with severe abdominal pain which was relieved by morphia. A gall bladder infection was suspected at this time. There had been a loss of 13 pounds in weight during the past two weeks. Examination revealed a rigid and elevated right rectus muscle with localized tenderness over the whole right abdomen. The total leukocyte count was 10,600, polynuclear-neutrophiles 79 per cent. Roentgen ray examination of the gastro-intestinal tract showed the appendix adherent to the cecum and quite tender on direct palpation. There was some irregularity and fixation of the cecum. Plates of the gall bladder showed negative for stones. At operation the following day the appendix was found to be sub-acutely inflamed and bound down by adhesions. The gall bladder was distended, the wall thickened and inflamed. Immediately above the gall bladder on the upper surface of the liver, low in the anterior superior space, a small abscess was discovered. The liver was attached to the anterior abdominal wall by a few fine adhesions. The abscess in no way was connected with the liver proper. The surface of the liver was sponged as clean as possible and drainage was instituted. The gall bladder was not disturbed on account of the abscess. The patient did not do well from the outset. The wound drained profusely and the temperature was septic in type. He finally developed a large accumulation in the posterior superior space. This was evacuated by rib resection but the patient finally succumbed from toxemia. Cultures showed pure growth of staphylococcus.

Comment: This abscess could have been discovered only by opening the abdomen. The indications were that it was of very recent occurrence and probably secondary to the appendicitis. It is doubtful that resolution would have taken place in this case as the abscess was very poorly circumscribed.

Case 5.—Mrs. J. P. M., 44 years of age, admitted to hospital with the following complaint: Daily fever of several days duration, accompanied by nausea and vomiting. Seven months past she had an operation for infected gall bladder with stones. Convalescence was slow, during which time she developed a low grade fever which persisted for three months. She returned to the doctor who had performed the operation, who then made a diagnosis of right pleural empyema. Following resection of the seventh rib in post axillary line with evacuation of a large quantity of pus she underwent some improvement but could not regain her usual strength and weight. The wound continued to drain for several weeks before closing. She was then admitted with the complaint as outlined above four months after the last operation. The total leukocyte count

was 12,700, polynuclear-neutrophiles 80 per cent. There was diminished expansion over the lower right chest with dullness and distant breath sounds over postero-lateral aspect of same side. There was tenderness and muscle rigidity in the right hypochondriac region. The liver edge was palpable. A probable recurrent empyema was thought of. The radiographic examination showed good illumination of both lung fields. The right diaphragm was very much elevated to a point between the sixth and seventh ribs posteriorly, but was smooth and regular. Radiological conclusions: Probable subphrenic accumulation. Aspiration in three different locations in subphrenic area did not reveal pus. She was kept under observation for three weeks during which time a daily fever persisted, becoming more septic, finally culminating in a circulatory collapse. The following day the radiographic examination revealed the right diaphragm elevated to a higher position than on previous examination. Aspiration in eighth interspace in post-axillary line revealed thick blood stained pus showing a pure culture of streptococcus. Following rib resection and drainage her convalescence was stormy and prolonged, however, she ultimately recovered.

Comment. It is doubtful that this case had an empyema developing three months after the primary operation as the symptoms were not suggestive. Furthermore the radiographic examination revealed good illumination of both lung fields, the diaphragm being very smooth. This is contrary to what one would expect following an empyema. On the other hand, the symptoms were very suggestive of a subphrenic abscess. Unquestionably subphrenic accumulations have been mistaken for pleural empyemas. Incomplete drainage following the first rib resection probably accounted for the re-accumulation in the subphrenic space.

CONCLUSIONS:

1. Subphrenic abscess, though comparatively infrequent, is a serious condition and often fatal. Convalescence from it is of long duration and sometimes attended by thoracic or other complications.

2. It is almost always secondary to infection elsewhere, most often from a neighboring abdominal focus.

3. Since the majority occur post-operatively, abscess should be suspected in patients who for no obvious reason maintain a variable type of temperature curve.

4. Diagnosis is made chiefly from the history, the mode of onset and physical signs. Roentgen ray and fluoroscopy are

invaluable diagnostic aids except in the presence of advanced thoracic complications.

DISCUSSION.

Dr. A. A. Herold: Dr. Kerlin has brought us a very timely subject, a condition which is frequently diagnosed a little late, I am afraid. I was wondering if this condition is not very often brought on by insufficient drainage where there is infection in the lower peritoneum. I have in mind two cases which recently came under my observation. One was a ruptured appendix which we were slow in diagnosing due to the unusual features connected with it. The man had a very high fever, and he gave a history of having eaten some spoiled food. He had a high leukocyte count of 24,000 to 26,000. We felt it was more enteritis than appendicitis until the appendix had ruptured.

He was operated on, but I shall not describe the technic. They cut down to the appendix region and put in several rubber strip drains and partly closed the wound, allowing drainage. Probably we did not allow sufficient drainage because the man had a very stormy time. He convalesced sufficiently to go home in about five weeks. He returned in a few days with severe respiratory pain over the lower right side and septic sweats. We suspected a subphrenic abscess. Roentgenogram showed a rarefaction in one area over the liver but we could not exactly locate where it was. I tried to aspirate. The surgeon then went in posteriorly and drained the cavity. The man did better for two or three days. Autopsy revealed pulmonary emboli from the subphrenic abscess.

I saw another case of a lady who recovered from a left side pneumonia and had a chronic gallbladder for a number of years, and had by this time impaired myocardial condition with some dilatation, and a respiratory trouble on the right side. There was a marked increase of dullness at the right base but no pulmonary signs indicating involvement of the right lung. Roentgenogram showed marked elevation of the diaphragm on the right side without any apparent infection in the lung. I told the physician in charge that I considered that a case of subphrenic abscess, upper liver abscess, but he was afraid to go into it. The last reports I heard was that she was expectorating pus. It had probably ruptured through the diaphragm. She may get well.

Dr. M. D. Hargrove (Shreveport): I think we all agree that Dr. Kerlin has discussed a very interesting and important subject.

I have been somewhat interested in subphrenic abscesses in the past year or two and in my experience they are rather difficult to diagnose even though we have the assistance of the roentgen ray and the laboratory.

In the past six months on the ward in the Charity Hospital in Shreveport we have had several cases which we thought were subphrenic abscesses, and I would like, very briefly, to give you a short résumé of those cases.

One, a colored male, came in complaining of pain in the lower right region of the chest and along the costal border. The pain had been present for about two months, with chills, temperature, and some sweating. He had a small bulging mass at the border of the costal region. The roentgen-ray findings were negative, that is there was no elevation of the diaphragm and no indication of any subphrenic abscess. He had a slight leukocytosis. Aspiration both at the costal margin and to the right in what we thought was the subphrenic space produced pus. The smears from the pus were sterile. At operation instead of finding a true subphrenic abscess there was apparently a cold abscess which had formed between the chest wall and the diaphragm.

Another patient was admitted with a very similar complaint of pain in the right side and in the lower part of the chest; pain on inspiration, and temperature. This patient gave a history of bloody diarrhea about 4 months prior to admission. The roentgen ray findings in this case were negative insofar as any deformity or elevation of the diaphragm was concerned, but it did show considerable enlargement downward of the liver. There was a slight bulging in the anterior axillary line. On aspiration we obtained about two quarts of typical amebic abscess pus. It might be interesting to say, that the man remained under aspiration treatment for a period of about thirty days, and we apparently cured his amebic abscess by that means.

The other patient that I wish to mention presents probably a typical history in the development of a subphrenic abscess. He was admitted to the hospital during the night complaining of some abdominal pain, some nausea with a history of having eaten some sardines or something in the afternoon. The intern assumed the condition was one due to food poisoning and gave him a purgative. The next day he was apparently better and was discharged.

He returned about ten days later stating that he had not been well since leaving the hospital. He had some slight temperature and had developed pain in the right side of his chest, pain on inspiration and pain on pressure over the costal margin. He also had some pain in the right shoulder and down the right arm as far as the elbow. He had a leukocytosis and was running some little temperature.

The roentgen ray report was: Opacity over the base of the right field extending up to the eighth rib with two fluid levels, apparently. The conclu-

sions were: Fluid in the right base with adhesions producing a walled off pocket.

Physical examination of the patient had shown some dullness, impaired respiration and rales at the right base, and with that roentgen ray finding we were inclined to consider it as a pulmonary infection.

He went along for a day or two until we decided to aspirate to see if there was pus in the pleural cavity. When the needle was inserted a short distance fluid was obtained, probably about twenty-five or fifty c.c. coming out of the pleural cavity. The needle was inserted about two centimeters farther, and to our surprise more fluid, distinctly purulent in character was obtained, coming from the subphrenic space. The patient went to operation and it proved to be a typical subphrenic abscess.

Undoubtedly he had had an attack of appendicitis, ten or fifteen days previous to admissions to the hospital and developed the subphrenic abscess subsequent to that.

I mention these cases to emphasize the fact that I think the diagnosis is rather difficult. The roentgen ray is not always infallible. It sometimes doesn't give you the information you want. It is not the fault, perhaps, of the roentgenologist but because it does not happen to be there. I think a good history as to the onset or beginning of the illness is of as much importance as any other one factor.

Dr. J. A. Danna (New Orleans): Dr. Kerlin's pictures showed something he did not call attention to, and I am rising to call attention to it.

Before I do, I want to say that the roentgen ray examinations may give you no definite information unless you use them properly. By fluoroscopic examination of the diaphragm over a subphrenic abscess it will be noted that the diaphragm is fixed or at least relatively fixed and does not move with respiration. That is a very important diagnostic point.

The other thing I rose to speak about is that I noticed in nearly all the pictures Dr. Kerlin showed a fluid line and air above the fluid line. Of course, you can only get a fluid line where you have fluid and air, and you can only get that fluid line if you have the pictures taken so as to bring out that fluid line.

I think it is remarkable that Dr. Kerlin had such a large percentage of infections that gave rise to the production of gas. That is rather unusual.

(Drawing) To call attention to the picture, he showed a fluid line like this. This is the chest wall, of course. That picture was taken lying down with the rays directed horizontally. If the patient had been lying flat on his back with the rays directly perpendicularly, looking through the

patient down at the plate, that picture might have shown nothing at all, I mean no pathology at all because you might get this combination of circumstances: You might get the lung which would be adherent to the lateral chest wall with pus either in front of it or behind it, and if the patient were lying down you would get a certain amount of opacity but perhaps only as much as you would get with a normal lung. In addition to that, because of the fact that the lung was adherent to the outer margin and stretched, you would even get lung markings so that you can imitate a normal lung if you have a certain amount of fluid plus a certain amount of air and look at it perpendicularly. In order to bring out the fact that you have fluid and air, you must always take your pictures so that you give the effect of gas above and fluid below, and you can only do it with the patient sitting up or lying down, having the rays directly horizontally.

Dr. H. G. F. Edwards (Shreveport): I just wonder how often subphrenic abscesses are passed up entirely and the patient goes on to recovery with a supposedly empyema, the abscess having ruptured into the pleural cavity. Apparently it is not a rare condition by any means, frequently following postoperative complications, and it may or may not be revealed by a roentgenographic examination.

A roentgenological diagnosis is based upon the density of the pathological lesion present and the relative density of the surrounding tissue. If this were not true there would be no such thing as a roentgenological diagnosis.

The diaphragm occupies a rather unique position in that it is interposed midway between the thoracic viscera and the abdominal viscera. It may, therefore, reflect conditions in the chest or conditions in the abdomen. The radiologist must therefore make a very careful examination of the diaphragm to determine alteration in position, alteration in contour, alteration in excursion or mobility.

A simply high diaphragm may be due to pleurisy, neoplasm of the liver, a subphrenic abscess, gumma, or it may be due to phrenic nerve paralysis in this day and time when they are doing removal of the nerve in tuberculosis of the lungs.

I have just a few slides I want to show, and I would like to say, in order not to be accused of plagiarism, that most of these are from the cases of Dr. Kerlin and some were made by Dr. Barrow.

(Slide) This shows a simple high right diaphragm, and which the radiologist can only report a high right diaphragm. Fluoroscopically this may be fixed or it may not be fixed. The mere fact that the diaphragm has excursion does not rule out subphrenic abscess.

(Slide) In this instance all one sees is a density of lower lobe with a high diaphragm on the right side. This may be due to fibroblastic pleurisy. It may be due to compression of the lung or it may be due to other lung conditions, but is in no way pathognomonic or indicative of subphrenic abscess.

(Slide) When one gets this picture with a fluid level and an arched diaphragm over it there is but one conclusion to draw, and that is that there is fluid in the subphrenic space. Naturally, as Dr. Danna has brought out, in order to get a fluid level the film must be taken in the upright position or in the lateral position so that the fluid can seek a level and not just spread out over the entire lesion.

(Slide) This is one which shows just a little bit of air and a fluid level which is also indicative of subphrenic abscess.

(Slide) This is one made in a lateral position with the patient standing, and shows the fluid level with the diaphragm above it.

(Slide) Here is another one with a fluid level and the high arched diaphragm above, likewise pathognomonic of a subphrenic abscess.

(Slide) Here is one made of the same patient that Dr. Kerlin showed, showing the patient was on his side with the diseased side up and the rays directed horizontally.

(Slide) In these different views, the horizontal, the lateral and the vertical, they all go to prove the one essential in successful roentgenology: that is, that a simple, single film examination of a sick patient does not reveal the necessary information unless it is positive. Just one single negative would be of no value. You should further your investigation by making it in the horizontal position, the upright position, and the lateral if necessary.

In this case the pathology appears on the left side. Here we have no valuable aid from the roentgen ray, the report of simply a high diaphragm. In some instances we may get most valuable information if we happen to have some air in the stomach or if we don't have it by letting the patient take a seidlitz, and then follow with number two powder immediately after and then we will get gas bubbles in the stomach which will show you the level of the diaphragm.

(Slide) This is brought to show that you must not confuse a liver abscess with a subphrenic abscess. Here you see the fluid level with the liver substance above it, which is entirely different from the subphrenic abscesses which show the fluid level and the arch of the diaphragm immediately above it.

Finally, I think we may say with justification that the roentgen examination is the most valuable single measure in arriving at a diagnosis

of subphrenic abscess. In many cases the diagnosis of subphrenic abscess cannot be made except by correlation of the clinical findings with the roentgen-ray findings, and finally the fact that a diaphragm is not fixed does not rule out subphrenic abscess.

Dr. W. S. Kerlin (closing): Unquestionably the improvement in the earlier diagnosis of this condition has grown within the past several years.

I can recall when I was an interne in the Charity Hospital in New Orleans and performing routine autopsies we would encounter obscure cases with fever and sweats and could not make a diagnosis, or at least a diagnosis was not made. At autopsy we would find a large accumulation lying high behind the liver in the posterior space. If that condition had been recognized, naturally they could have been given relief provided it was recognized in time.

As I stated, within recent years these cases have been recognized more frequently. They are sought for, and as I mentioned in my paper they should always be considered in any postoperative condition where the patient is not doing well.

Dr. Hargrove brought up an interesting point in the discussion of one of his cases by stating that the symptoms developed suddenly without any evidence whatever of a cause in the way of dysentery, perforated viscus or an acute appendicitis. I think that probably the appendix acutely or subacutely inflamed and overlooked would account for some of these obscure accumulations because, if you remember, I gave a report of one case in which a young girl had a subacute attack of appendicitis with very little pain and the abscess developed four or five days after the operation.

Dr. Danna brought up the question of the gas accumulation. I will admit that I had an unusual series of cases and might add that they were observed within a period of two or three months. In three or four cases that we observed there was this extensive gas accumulation. I am not altogether able to account for it as the symptoms of abscess formation had not existed very long. The majority followed acute appendicitis with colon bacillus infection.

One point that Dr. Edwards failed to mention in his discussion was that a common cause of elevation of the diaphragm is due to hepatitis from many different causes.

There is one plea I would like to make to the radiologist and that is more frequent use of the fluoroscope in conjunction with the plate method. I believe that so frequently they will use the plate method and not the fluoroscope. I believe that a combination of the two at times would give us additional valuable information.

TREATMENT OF EMPYEMA BY ASPIRATION AND AIR REPLACEMENT.*

R. R. ROBERTS, M. D.

NEW ORLEANS.

Empyema is the accumulation of pus in the body, especially in the chest. It is the result of infection introduced in this cavity through one of three different ways; first, though rarely through the blood stream; second, through a wound; third, the most frequent and which we are going to deal with, the spread of an inflammatory or septic process from the lungs or pleura. Whatever the source of infection is, it will be either a walled off or encysted abscess or a purulent infection of the entire cavity.

We are going to illustrate thirty (30) cases today which have been observed during the last eighteen months. Seven were encysted abscesses into the lung tissues and twenty-three were purulent infections of the entire pleural cavity. We believe all were the result of a recent pneumonia. Streptococci, staphylococci, and influenza bacilli were present, but the pneumococcus predominated in this series. In the encysted empyema the abscess may be situated in any region of the pleural cavity and it may be necessary to transverse the normal structure of the pleura and lung to reach the cavity, but in the greater number of cases it is free just under the parietal pleura.

In the cases of encysted empyema the cavity will heal by gradual formation of granular tissue. These cases require the closed method of aspiration extending over a period of three to ten weeks. But in the cases of free empyema where the entire cavity is filled with pus, we do not believe by this method that we will have any adhesions to form, for after the fluid is drawn away each time and air is replaced and in this way, the healing is gradual.

Whichever method of treatment is employed, recovery is impossible until the abscess ceases to act as a source of infection.

This is also true where a bronchial fistula forms and the patient continues to expectorate pus, unless the cavity is kept empty either by open or closed drainage. Unless so evacuated the case will run a most protracted course because the bronchial fistula has not had an opportunity to heal by granulation. We believe that the mortality rate from the routine method of incision and tube drainage can be greatly lowered.

Out of thirty (30) cases we have had during the past eighteen months in our service at Charity Hospital we have lost two, which represent a $7\frac{1}{2}$ per cent mortality, and by the open drainage method it is about 30 per cent and higher.

In the cases where empyema is diagnosed it first begins as a thin purulent fluid and later becomes thicker, and in this type of case by the closed method we were able to begin the aspiration and air replacement method as soon as the case was diagnosed. Empyema, in the open and drainage method, is better left alone until the fluid has become very thick and purulent, and in this type of case we know that the patient has absorbed a great amount of toxic poisons from the pus.

We know that some of these purulent infections of the entire cavity may start as a small abscess in the lung tissue and may suddenly rupture giving no time for the pleura surrounding the area to become adherent, and we have as a result a free empyema of the entire cavity. We then treat as a free empyema and as soon as the focus of infection heals by granulation we have no more pus formed.

Out of the thirty cases we have treated, the first death was that of a child of four (4) years which came in with an encysted empyema. This case was very toxic and was aspirated but twice before death. The second case was a child of nine years which came in with a free empyema

*Read before the Louisiana State Medical Society, New Orleans, April 14-16, 1931.

involving the entire hemothorax. Nine hundred cubic centimeters of pus was removed and replaced with air. This was done while the patient was lying in bed on his back with head and shoulders elevated about 4 o'clock in the afternoon and patient died at 7 that same day. We believe this would have occurred under any method of treatment. This patient gave a history of having had pneumonia for four weeks, very toxic, with marked cardiac and respiratory depression. We have had these thirty cases in the last eighteen months and my interest was due to Dr. J. A. Danna who taught me the technic, along with Dr. J. Signorelli and Dr. R. A. Strong and Dr. Maud Loeber, who watched with interest the results.

TECHNIC.

The physical examination, including inspection, palpation, auscultation and percussion outlines the location of the purulent effusion. This is checked by a careful study of the roentgenograms. The lowest point of the empyema cavity is selected and this point is anesthetized with 0.5 per cent novocain or procain solution. After infiltrating the skin, muscle and pleura, a large sized aspirating needle is attached to a stiff rubber tube, one that fits the needle, and also a fifty or 100 c.c. syringe. The rubber tube is clamped midway with hemostatic forceps. The needle is then inserted into the lowest part of the empyema cavity. The syringe is attached and the pus is withdrawn. Then the syringe is disconnected and emptied with the rubber tube clamped. The syringe is then filled with air which is injected into the cavity replacing the pus removed. This is continued as long as it is possible to withdraw fluid. When all the pus or fluid has been removed, air will be withdrawn showing that the cavity is empty. The needle is then withdrawn. This method is used only when the patient has an encysted empyema or partially filled cavity. In the cases where the pus has completely filled the cavity and is free, where the heart and mediastinal structures are displaced to the

unaffected side, we handle somewhat differently. In this type of case when we draw off the pus we do not inject each time as much air as we remove fluid, and in this way the heart and mediastinal structures are able to resume their normal positions, and the patient does not suffer any discomfort or shock. Our average is about $\frac{3}{4}$ as much air replaced as fluid removed.

With two of our patients who had the cavity filled with free pus we tried to inject as much air as we removed fluid, one of them was still very uncomfortable at the end of aspiration and as soon as the excess air was withdrawn the patient became much more comfortable and did not seem to have any further respiratory difficulties. The other was a patient of four years who had free empyema of the right chest and 850 c.c. of air replaced. After two hours the patient was still uncomfortable and had developed a bulging of the 2nd and 3rd anterior interspaces, besides a displaced heart and mediastinal vessels. But as soon as the air was gently withdrawn the bulging disappeared. The child was fully recovered in two weeks following two more aspirations.

We prefer to have the patient sitting in an upright position but when they are too sick we aspirate in the recumbent position with the head and shoulders supported above the rest of the body. The amount of pus aspirated varies from a few c.c. to 1000 c.c. at one time, and we repeat as often as every 3-7 days. We also observe the temperature chart as well as the discomfort of the patient. After the patient has been aspirated the temperature drops to normal and as soon as the temperature begins to rise we again aspirate the cavity. If the temperature does not return to normal we look for another cavity which was overlooked and was not drained. In some cases there will be a fibrous exudate which will prevent emptying the cavity entirely, as it will block the needle. In this event we will withdraw all the pus we can and leave the patient for a few days during which time the fibrous threads will liquefy. We will

then have no trouble in emptying the cavity. In these 30 cases we have never found one in which we had to resort to surgery if we work patiently and give them a chance to liquefy. We do not say that adults respond the same as children. In some of these cases we thought of injecting with some weak antiseptic solution such as Dakins solution, or mercurochrome, but after a few days when we went back the second time we had no trouble with fibrous material, and the pus was withdrawn without difficulty.

Those cases in which we tried to aspirate without replacing air, the negative pressure would become so great the child would cry from pain and at times there would be either cardiac or respiratory embarrassment followed by shock. When the fluid is replaced with air there is no discomfort and the shape of the chest is maintained. We believe that complete emptying of the cavity is essential to bringing about a quick cure. We have had three cases cured with three aspirations, seven with four, and the average being seven aspirations. Some have required as many as ten aspirations. When the cavity is entirely emptied the temperature drops at once to normal. These little patients will sit up in bed, seem quiet and will nourish much better, and if the temperature does not drop to normal we know that there is some complication.

We have found that it is very essential for the patient to be in an erect position when the roentgenogram is made and thus the rays will be directed in a horizontal direction. If the patient is unable to sit up we take them in our arms across over chest, placing the plate between the child and our chest wall and take the picture with the rays directed in a horizontal direction. In this way the cavity is shown very plainly as the fluid line will be demonstrated clearly with contact of the air replacement above.

We believe that the treatment of any abscess is drainage. We think the aspiration method of treating empyema in children is

shorter, less painful and the mortality is greatly decreased.

DISCUSSION.

Dr. J. A. Danna (New Orleans): The method of treatment of empyema that Dr. Roberts has just spoken of I have been using since 1923, and my first case was more or less accidental. That is, I used the method as a preliminary to a thoracotomy.

During the War we were taught that we must not immediately operate on a case of empyema just as soon as pus forms; that we must wait until the walls of the empyema cavity become rigid by inflammatory infiltration when the opening of the chest is not accompanied by the shock and dyspnea and discomfort that it would be if you did it immediately after the formation of a purulent effusion.

In this case I removed as much of the fluid as I could and gradually replaced that fluid with air. I had been doing this with other forms of effusions for quite some time, ever since my return from overseas. I was quite surprised to find the woman's temperature drop to normal and in a few hours find her comparatively well. In four or five days, when her temperature began to go up again I said, "We had better go ahead with the thoracotomy."

She said, "No, Doctor, don't you think you had better do the same thing over again?"

I did. To make a long story short, I did three aspirations on her and at the end of the third she stayed well. A roentgenogram taken three months afterward showed a normal chest. I began to look for opportunities of using the method.

I have had about forty-two cases so far. I reported before the Southern Surgical Association in December on thirty-five. Of these thirty-five, twenty-nine were adults and six were under fourteen years of age. There have been two deaths in my series neither of which I believe could have been attributed to the method. One was an old man who developed a pulmonary embolism in the course of treatment and died rather suddenly. The other was a little girl who had had a hemithorax filled with pus. There was so much pus that the entire (hemithorax) mediastinum and heart were pushed over to the other side. She died several hours after a partial emptying of that chest.

The doctor called attention to the fact that if your patient's temperature does not drop to normal after emptying the chest you must look for another cavity. I have a boy in the Hotel Dieu where I emptied a first, second and third cavity, these three cavities not communicating with each other at all.

He speaks of a case in which he had to remove air. There is one type of case in which this

treatment is dangerous and that is the type with a bronchial fistula in which the patient continues to cough air into the empyema cavity and increase the pressure to such an extent sometimes that they actually die as a result of marked displacement of the heart and mediastinum toward the opposite side. In these cases, for which you must be on the lookout, if you will merely stick a needle in there and remove that air they get along very well.

Let me emphasize the fact that while this work has been done by a man on the medical side of the service at Charity, the work is not to be lightly undertaken by anyone who either is not himself prepared to handle and possible emergency or is not in contact with men who can handle any emergency that may arise. There is an element of danger in handling these cases and they have to be watched very closely. They require a great deal of time and a great deal of attention.

I am impressed with the Doctor's observation that those with large effusions do better if you don't replace the entire amount of fluid with air. Do you mean if you take out 1000 c.c. of fluid and put back 700 or 800 c.c. of air? I think this is a very valuable observation, and I think it will help to get these patients well perhaps quicker than otherwise.

I have been trying to get the profession in New Orleans interested in this subject for the last six years, since I reported my second case. I have talked before the Orleans Parish Society. I have talked before the State Society, and I have done everything in the world I could to get somebody interested. So today I am very happy to see that Dr. Roberts is able to report thirty cases with results that are better than any results you get with any other method.

Dr. A. A. Landry (Plaquemine): We have had two cases. The first recovered promptly under two aspirations. On the second case an accident happened. We had infiltration of pus in the chest wall between the skin and the muscle due, I thought, because of injecting too much air. I would like to ask the doctor if he ever encountered that complication. Of course, with infection of the chest wall and fistula discharging we had to do a thoracotomy.

Dr. R. R. Roberts (closing): In answering the doctor's question, I think that was partly due to having your needle filled with pus, and probably your rubber tube, and when you came out you probably had too much air which caused the pus to go back between the muscle and the skin. We had that on two occasions. We go on, keep it carefully drained, and help clear up the condition without having to do a thoracotomy. It doesn't

amount to anything in the cases we have had. We have had two of them.

I just want to illustrate a case we have here. (Drawing). This is your chest completely filled with pus, with the heart displaced way over. On this side, after aspiration, we removed practically all the pus. We inject air but we have a collapsed lung which we generally get.

(Slide). Here is another picture with a fluid level up here. We go in as low as we can.

(Slide). This is that same case about six weeks later, that had been running a temperature and was cured. There was discharge. The only thing you see is a little air in the upper portion and a little thickened pleura, and a little air between the two pleuras here and the lung. The lung hasn't completely gone back to normal but we expect it to soon.

TONSILLECTOMY WITH SOME OF ITS PECULIARITIES.*

C. J. LANDFRIED, M. D.

NEW ORLEANS.

In accepting the invitation to read a paper before this representative body of medical men and surgeons, I did so purely in appreciation of the honor and compliment paid me by the learned chairman of this section and hope in this narrative of some experiences over a long period of years in dealing with the diseases and surgery of the tonsils that the time will not have been spent in vain.

When we go back to the ending of the last century and the beginning of this one, the differences in our understanding of this subject and the ease with which we accept its responsibilities today give us some sense of satisfaction in appreciation of the kindness of nature that we should be here to give any expression of it.

There may be many of you here today who have gone through the ordeals of tonsillotomies and adenotomies with children strapped to the chair and the head held by someone who may happen to be the most convenient at the time; with the old Fahrenstock tonsillotome placed in position around the tonsils and the gland yanked off, trust-

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ing when we looked into the throat that there will not be sufficient spurting of blood to appall us, accepting, however, the matter of course terrorism of the patient when he had sufficiently recovered from the asphyxiation of the ethyl chloride or ethyl bromide.

It was a common understanding with the throat men of that long ago period to find children brought back to the hospital of operation and almost go into convulsions from the terror of the ordeal. Then we felt that some improvement had come on with the introduction for our use in this work of the Mackenzie tonsillotome which was believed to be safer in protecting the pillars and sparing us the annoyance and trouble of severe hemorrhage, only to realize that this procedure had its many disadvantages because it did not take off enough of the tonsil. For that reason many of us in our gropings for better technic thought we had the last word in the Mathieu tonsillotome because of the transfixing fork and our ability thereby to remove nearly the whole tonsil. Indeed and this did almost as well as many of our cases done today with dissection and snare, but was undependable because there was no exact certainty of just how much of the gland would be cut off.

I have no doubt that many of you recall with horror the apprehension and dread of stopping hemorrhage in tonsillectomy of that period with all sorts of compressors, the Mickulicz especially, but most of us using any long forceps to be had at the time, usually placental forceps. Troublesome hemorrhage in those days had us willing to accept any suggestion in technic that would be liable to give us a bloodless procedure, hence the use of the electric wire snare intended to loop around the tonsil and the current turned on bringing the wire to a cherry red heat leaving the surface of the tonsil seared to prevent bleeding.

The many disadvantages of this operation can be well imagined and was thoroughly realized in the reaction that followed its use and the dissatisfaction in not getting out enough of the gland, though in

those days it dawned upon many of us that we were probably doing harm in some cases by removing too much of the tonsil, which not infrequently unintentionally happened, so that in comparing these days with that period we quite understand ourselves when we appreciate what the advances in medicine and surgery mean to humanity and our own professional comfort.

Therefore, we were up against it for lack of anesthesia technic, the control of our patient and an inability to overcome all the obstacles presented with such a condition, I presume we must all have been struck simultaneously and persistently with the need for much improvement, or discontinue the work, hence one would perambulate around to see others work in this field but would find nothing but disappointment, as the other men everywhere were up against the same impracticable proposition. We would find Ingalls in Chicago using his punch forceps, Robertson his scissors, and Freer his knife, on the order of the bread knife of the household, and how these procedures made the sweat come from the victims of this epochal era, especially Freer's knife when it was sawn through a tonsil made rigid by vulsellum traction, not to say all the things that happened to the operator as well.

Much relief was experienced, as when the door to some abstruse problem is opened to the understanding of the school boy, with the dawn of the recumbent position and etherization through the mouthpiece; and the suction apparatus, which robbed these operations of all their terror and made for the definite and accurate surgical technic of today.

This, too, I may say, was the beginning of the control of hemorrhage as a complication of tonsillectomy and stands today as the beacon light that has given us all our guidance. It allowed us to carefully dissect the tonsil out, as the surgeon would any other gland, and made it possible to expose and see the bleeding points, when it did not take much stretch of the imagination to conceive the idea of putting the Pean

forceps on these points at the time of bleeding and suturing them. This was the dawn of the new era.

We had not yet come to the bacteriological understanding of throat infections and had not dreamed of all the diseases that are laid today to the gateway of the tonsil as the source of trouble. Thanks to the hard work and sacrifices of the clinical and laboratory men, much today is looked upon, in the recognition of tonsillar infections and with the surgery for their prevention, as the typical exemplification of the efforts of our science to prevent disease, and only feel, with reference to tonsillar extirpation, that in many instances it was not done soon enough.

When we realize the possibility of infections, by juxtaposition, going from the tonsillar and peritonsillar areas into the parapharyngeal space, where vital blood vessels and nerves are found that easily lead any baleful process upward into the brain through the carotid and jugular foramen and the foramen lacerum and downward into the mediastinum, it is seeming strange that we have as little personal experience with thrombotic emboli and septic endocarditis. Nevertheless, they happen, and it is infinitely better that we foresee these possibilities from chronic tonsillitis, and prevent them by proper surgical measures.

We have all had the gratifying experience of relieving acute polyarthritis by the removal of an infectious tonsillar focus by tonsillectomy and of preventing recurring cervical adenitis, and the many forms of pains due to neuritis and myositis. Whether the removal of the tonsils relieves any tendency to laryngitis, bronchitis or pneumonia is questionable, so far as the observation of many experienced observers is concerned and indeed some of these same observers believe that these affections are more frequent in tonsillectomized children. But it is generally accepted as beneficial in preventing sore throat and in making children less susceptible to scarlet fever and diphtheria. Acute head colds and otitis

media while lessened for a period of three or four years has been rather not so over a ten year period.

We have cases where following tonsillectomy there has been a transient aggravation of a nephritis, endocarditis or polyarthritis, rarely Ludwig's angina has followed this procedure, as well as streptococcal septicemia. In these cases it is natural to believe that infectious material was forced into the circulation, hence the rule to avoid surgical intervention in any acute inflammatory or phlegmonous processes.

It will assist us in avoiding unpleasant complications to go deeper into the past history of the patient, especially in cases where an active pulmonary tuberculosis existed, though held in abeyance for many years and no mention made of it by the patient unless ferreted from him.

A case in point of recent date will illustrate this serious phase of the contention. A man about sixty years of age applied to me at the office about eight months ago with the request to remove his tonsils. Upon examining the throat and pressing on the tonsils, I found a great deal of pus and detritus in the crypts and without further serious thought believed that he must know what he was talking about. I was rather impressed with his general facial appearance of sallowness and discomfort, as though he might have some chronic ailment or pain. I asked whether he had ever taken a general anesthetic and the answer was that he had his gall bladder removed or drained, I do not know just exactly which, three years previously by one of our most able surgeons here at one of our hospitals, for some digestive disturbance that he complained of. I did not go further into the examination than to find out that there was no active nephritic, cardiac, or arteriosclerotic condition to contraindicate a general anesthetic and, as he seemed upon examination of the throat to be quite irritable, I appointed a time to remove his tonsils at the Touro Infirmary under a general anesthetic. This was done without any untoward affects, Dr. Caine giving the anesthetic for

me in the recumbent position, there being no special bleeding or aspiration of blood into the lungs, or any septic complicating condition apparent. Two months after the operation and long after I had dismissed him as recovered, one afternoon he called to see me stating that he felt badly and wanted to know if the throat was well. Whereupon I took his temperature, because his pulse was quick, and found that the thermometer registered one hundred and one degrees. The throat seemed perfectly well, there were no lymph nodes in the neck or mandibular region and I told him he should see his internist. He called his surgeon, who after examination, told him that his trouble did not come from the abdomen, or any surgical condition, and placed him in the hands of an internist, who hospitalized him and found an active tubercular condition of the lungs and pleura accompanied with persistent temperature ranging between one hundred and one and one hundred and three. He finally developed a severe intestinal complication, said to be tuberculous by his internist, and died about one and a half months after his hospitalization.

I am sure if I had elicited the fact that this patient had been an active tubercular one, in years gone by, and had sought the cooperation of the internist, I would rather have advised against the surgical intervention for his chronic tonsillitis and probably would have recommended the roentgen irradiation of the tonsils for sterilization.

In conclusion, the end-results of tonsillectomy cannot be better summarized than to quote verbatim from the Practical Medicine Series 1930 of Small, Andrews and Shambaugh that

1st. The real value of the removal of tonsils and adenoids cannot be definitely established in a few years. Apparent benefits during the first post operative years are not so evident over a ten year period.

2nd. Outstanding benefits are apparent in influencing the incidence of sore throats over a ten year period.

3rd. Substantial benefits are apparent

in rendering children less susceptible to scarlet fever and diphtheria.

4th. Acute head colds, and otitis media, though definitely lessened over a three year period, are not essentially influenced over a ten year follow-up period.

5th. Cervical adenitis is decidedly reduced in tonsillectomized children over a ten year period.

6th. The respiratory infections, such as laryngitis, bronchitic and pneumonia, not only are not benefited but actually occur more frequently in tonsillectomized children.

7th. First attacks of rheumatic manifestations occur from thirty to fifty per cent less often in tonsillectomized children. The greatest reduction occurs in children tonsillectomized early. Recurrent attacks are not benefited at all.

8th. Incomplete tonsillectomies do not offer the same protection against the usual throat complaints and infections as complete removal of tonsils.

9th. The hazards of tonsillectomy must be considered in evaluating the end-results. Considering this hazard, the late results seen in twenty-two hundred children ten years after operation are evident only in the reduction of sore throat, cervical adenitis, otitis media, scarlet fever, diphtheria, rheumatic fever and heart disease.

Finally, my dear friends, I cannot leave this subject without a plea for a higher justice among us in dealing with some of the unsatisfactory results of an intended radical tonsillectomy.

I daresay there is no one engaged in this line of work who has not had the disappointment and distress of looking into a throat after a tonsillectomy and finding some part of the tonsil, usually the lower pole, left, the very thing against which we are bending our greatest efforts, knowing that to leave a part of the gland is almost as bad as no operation at all.

A plea to exert ourselves in dispelling the poisoned state of the minds of parents, or others, caused by this occurrence, knowing that the only ones to whom this has not

happened, as an operator, are those who have never done much of it.

DISCUSSION.

Dr. J. P. Leake (New Orleans): Anyone interested in throat work cannot fail to appreciate such a paper as Dr. Landfried's, with its story of the evolution of tonsillectomy from the barbarous methods of former days to the refined technic of the modern period. Anybody who has done tonsillectomy over a period of years will be impressed by the number of excellent results and by the number of failures also. Some of these failures are due to carelessness, I admit, but when the tonsil is properly enucleated and the surrounding structures are not damaged, the disappointments are not always easy to explain. I have looked into throats I have operated upon, with, as I thought, every care, and what I have seen there has made me very charitable in judging the work of other men. None of us are 100 per cent perfect. I hesitate to say that inflammatory diseases follow the removal of the tonsils; the connection seems remote, and it is more logical to believe that these conditions existed prior to operation and were simply not detected.

It is appropriate here to mention the respects in which Dr. Landfried has been a pioneer in this type of work. He was the first to insist that tonsillectomy was a hospital procedure, a major operation, not to be performed in the office. He was a pioneer in the effort to remove tonsils in their entirety rather than by morcellation. This is entirely possible today when we can secure a continuous ether anesthesia and can operate under it slowly and deliberately. Finally, he was a pioneer in his insistence that tonsillectomy was not a safe procedure unless hemorrhage was absolutely checked. He had been following that plan for a long time before it was mentioned in the literature.

Dr. Otto Joachim (New Orleans): Dr. Landfried and I, and I for a few years longer, experimented the evolution of the tonsil operations and it is gratifying to have him address us on this subject which he knows so well. I am, however, more particularly interested in his report of end-results, which are not nearly as encouraging as we had hoped they might be. The results in rheumatic affections and arthritis are far from 100 per cent though we see many gratifying cases. Perhaps the explanation is that we are doing tonsillectomies when they should not be done. That is partly the internist's fault. He sends the patient to us when he can find nothing else to account for the disease. I take a rather firm stand. I will not remove tonsils in which I cannot find some pathology. I may fail to benefit some cases which I might have benefited, but I avoid many useless operations. Infectious dis-

eases, ear complications, obstruction to breathing, these and other conditions offer a different and favorable problem, but I still contend that tonsils should not be removed promiscuously in the hope of benefiting obscure diseases elsewhere.

Dr. M. P. Boebinger (New Orleans): When I began the specialty of otolaryngology, it was necessary for me to choose a clinic in which to observe and to learn. Dr. Landfried was the man I chose to follow, and I have never regretted my decision. He gave in those days, just as he gives now, the impression of painstaking care. His insistence on many sutures was unique in those days, it has become very general now, and it is perfectly reasonable. No abdominal surgeon would close the abdominal cavity leaving oozing capillaries and bleeding vessels, why should a throat surgeon not follow the same plan?

We should insist on certain factors of safety for our patients, a general physical examination, the necessary laboratory studies, including the coagulation time, and the refinements of surgical technic. Dr. Landfried has emphasized the necessity for all of these, and we are safer surgeons because we have learned our trade from him.

Dr. Homer Dupuy (New Orleans): A master technician, a pioneer, in the surgery of otolaryngology, has just spoken to us, and we are grateful for and inspired by what he has said. He has showed us how the surgery of the tonsil has evolved from the barbarity of a quarter of a century ago to the refinement of the present day. He was the first in this city to realize that tonsillectomy is major surgery, the first to make it a hospital procedure.

I want to comment on the association of tuberculous disease of the lungs with tonsil diseases. In Charity Hospital, in the Dibert Memorial, we frequently remove diseased tonsils, on the advice of Dr. Durel, when it is felt that the tonsillitis is retarding the patient's recovery. The operation is always done under local. Ether anesthesia has no place in the removal of tonsils in the tuberculous.

Children are especially likely to have recurrent colds when the tonsils are removed too early, and I will not operate, no matter what the pediatricians say, until the child is over three years, unless, of course, the tonsillar disease is of the obstructive type.

Tonsil surgeons can be divided into two groups, the instrumentalists and the dissectionists, but both have the same objective, the complete removal of the tonsil. Both of them occasionally fail, because they do not consider the anatomy of the parts. They overlook, or they forget, that no matter how elaborate their dissection is, lymphoid cells are present in all tissues surrounding the tonsillar fossa. Complete tonsil excision does

not preclude possible hyperplasia of these lymphoid cells. Dr. Landfried admits that even the most complete dissection of the tonsil does not prevent the occasional return of these lymphoid masses. It is a comfort to us that such a master admits his own failures.

Dr. C. J. Landfried (closing): The laity is becoming more and more unwilling to have promiscuous tonsillectomy done, and it is becoming more and more necessary for doctors to discriminate the cases in which they advise tonsillectomy. If the tonsil is not doing harm, it should stay where it is. People are doing some of their own thinking today, and we must be sure to advise them wisely and conscientiously. It is not always easy to be sure of our position. I have been seeing a man for a long time who has considerable pus in both tonsils, who tells me he had had it for years. He has an occasional sore throat, but no joint or muscular pains; the electrocardiograms show his heart normal and, as he has never shown the slightest desire to discuss with me the removal of his tonsils, I have never pressed the matter with him.

The best guide, I think, for the need of tonsillectomy, is the recurrence of acute tonsillitis.

Even the best surgeon can have a piece of tonsillar tissue left after tonsillectomy and we should, therefore, be charitable in our judgment of others. I can truthfully say that I have never permitted a patient to go from my office believing evil of the man who proceeded me, and I hope God destroys my tongue if ever I say a word which will reflect on the skill or the judgment of a confrere in such cases. We are all human, I think we all do our best, and I think the man who claims he has had only perfect results is the one who has never done much of this kind of work.

CHAULMOOGRA OIL IN EYE, EAR, NOSE AND THROAT.*

T. J. DIMITRY, M. D.

NEW ORLEANS.

This contribution is an extension of a previous paper¹ in which chaulmoogra oil and its derivatives were discussed in relation to their medicinal value when used by atomization into the nasal passages in the treatment of leprosy of the eyes and nares.

Those who will read that paper will learn that after the use of the oil in the nose, the leper experiences a great improvement in

breathing and is able to blow his nose with greater ease and satisfaction; also, that an amount of nasal secretion is gotten rid of, a fact which is followed by a mitigation in the disagreeable intonation of the voice. That paper further reveals that the leper is made more comfortable; that the edematous condition of the eyelids disappears, and as a consequence he sleeps better.

In addition, the paper called attention to the beneficial effect of the oil when instilled into the eye. For this treatment the oil was incorporated with fifty or seventy-five per cent of Wesson or olive oil, because in the earlier tests it was learned that in all cases, except those in which the cornea and conjunctiva were anesthetic, the oil was irritating and annoying when instilled pure into the eye and that this irritating result was increased by rubbing.

Finally, the paper concluded by an implied appeal that the oil and its esters should be used respectively in the eyes and nose of the leper as a part of routine treatment of the disease.

Having reached this conclusion the writer began to use the same treatment in other conditions of the eye and nose. And in this connection the experimental work and clinical evidence have led to this additional article, which calls attention to the therapeutic effects of the oil and its derivatives in eye and nasal conditions other than leprosy. That is, the writer is presenting a "lead" which he hopes will be justified by the use of these agents. In the following paragraphs he states succinctly the results of his own work.

In blepharitis marginalis the oil has been observed to be a most satisfactory therapeutic agent. As a method of comparison it was used thus: one eye of a patient was treated with yellow oxide ointment, and the other eye with a twenty-five per cent chaulmoogra oil. The oil was as beneficial as the oxide ointment. In fact, he has found the oil of at least equal therapeutic effect in those conditions in which the oxide is commonly used.

In trachoma, the pure oil rubbed into

*Read Before the Orleans Parish Medical Society, October 12, 1931.

the lids produces a typical diphtheritic membrane. Of course, it is true that a membrane is usually produced by manipulation of the lids when they are grataged or massaged, but the conclusion the writer has arrived at is that the oil hastens the production of the membrane and that it adds to the merit of mechanical manipulation; and it is certainly superior to the copper and silver preparations so commonly used.

In ulcer of the cornea it appears as a most satisfactory agent, and like a great number of such drugs can be used where old scars are to be noted on the superficial layers of the cornea.

In the treatment of acute infections and chronic catarrhal conditions of the conjunctiva, the ethyl esters have been found much more efficient than the oil. Being a thin, light, oily fluid, when instilled into the eye they spread quickly over the whole globe and produce momentarily a pleasantly cooling effect followed by a sensation of dryness. This sensation, however, disappears with the use of a vegetable oil.

Now, as regards nasal conditions, the effect has been found to be immediate when the oil or its esters are atomized into the nose: the mucous membranes are decongested, breathing is made more comfortable, and secretions are readily blown from the nose. Moreover, either the oil or ester is much less irritating than the ephedrine and adrenalin preparations, and the results are much more permanent; and one of the most noteworthy attendants on their use is that the vascular system remains unaltered.

In addition, the oil and ester have been found to influence favorably the cure of acute rhinitis by reducing the turgescence of the nasal mucous membrane and at the same time stimulating the serous and mucous glands of this membrane, whose secretions add their bactericidal effect to that of the oil or ester, thus enhancing the virtue of the treatment and accelerating the cure.

In hyperplastic sinus disease they open up the ostium by depleting the mucous membrane and making for a better drainage of the mucous lined cavities.

Their power of softening and loosening scabs, of healing suppurating surfaces, and the depletion they effect in the membrane, make for greater breathing space through the nasal passages. Moreover, the fact that they possess the demulcent properties of the vegetable oils with a specific virtue of destroying acid fast bacilli, shows to what extent one may carry on with such agents at one's disposal. In fact, the writer has found them useful in atrophic rhinitis, acute sinus conditions, hayfever, asthmatic bronchitis and neuralgia of non-suppurating nasal origin.

Attending the above stated results were some observations on the respective values of the oil and esters. It was noted that though both the oil and the ester produced the same beneficial effect when atomized into the nose, yet the repeated use of the ester was followed by a sensation of dryness, whereas the frequent use of the oil, though unaccompanied by dryness, was more irritating. It was further noted that the ester in combination with cotton seed oil lost this undesirable drying effect; and its less frequent use offers advantages over the oil in so far as it is less irritating. Moreover, it was found most pleasing to the nasal mucous membrane and its odor is inoffensive.

The result of these observations leads to the following questions:

(1) Is the oil or ester hydrolized when instilled into the eye or atomized into the nasal cavities? If so, is then the beneficial action of the oil due to the glycerine and fatty acids set free by hydrolysis?

(2) What then causes the irritating effect? Is it excess glycerine or excess acid?

(3) Could a mixture of glycerine and the fatty acid be made in such proportions as to produce the desired effect on the mucous membranes without the irritation noted in the use of the oil or ester?

(1) Dimitry, T. J.: The treatment of the nasal passages and the eyes with chaulmoogra oil in leprosy, *Amer. Jour. Trop. Med.* II: 65-69, 1931.

DISCUSSION.

Dr. Homer Dupuy, (New Orleans)—My experience with chaulmoogra oil is limited to its application in laryngeal tuberculosis. This experience covers over five years, using it in private practice and in Dr. Wallace Durel's Service in the Dibert Memorial of the Charity Hospital. With the assistance of Dr. Spencer McNair and H. F. Brewster, we have in that service applied the drug in solutions of 30 to 40 per cent in olive oil. Over one hundred and fifty cases form the basis of our conclusions. Allowing ten applications to each patient, we have had unusual opportunities to test the value of this agent in its special action on the acid fast bacilli, in which group belongs the tubercle bacilli, and yet in laryngeal tuberculosis our results have been practically zero. We admit this with regret, for we had hoped, at least, to relieve that most distressing condition, of inability to swallow, which certainly hastens death in these afflicted ones. We had hoped that chaulmoogra oil could replace those more painful procedures of the galvanocautery, formalin solution applications and alcohol injections of superior laryngeal nerves. But it has not done so. The essayist is certainly not a static individual, and that is to his credit. But his enthusiastic claims relative to chaulmoogra oil do not coincide with our experience in a field where its real usefulness was tested in a rather large number of patients.

Dr. Chas. A. Bahn, (New Orleans)—Dr. Dimitry's interesting experiments with chaulmoogra oil in ophthalmology are timely, because relatively little has been written on the subject in this country.

Some nine years ago in Peking, China, Dr. Harvey Howard noted certain resemblances between leprosy and trachoma. He conceived the idea of using chaulmoogra oil in trachoma and wrote upon the subject in the *China Medical Journal*. The contributions was abstracted in Europe where several articles per year have been written on this subject. The following are outstanding:

Bozzoli at the Italian Congress of Ophthalmology in 1928 reported a series of trachoma patients treated with chaulmoogra oil. He concluded it had some value in uncomplicated forms.

Zamkofski in the Russian Archives of Ophthalmology during 1928 reported a series of trachoma cases in which one eye was treated with chaulmoogra oil, and the other eye by different methods. His conclusions were that the eye treated with chaulmoogra oil improved no more rapidly.

It will be of interest to observe the usefulness

of this remedy in the other ocular diseases which Dr. Dimitry has mentioned.

Dr. Spencer B. McNair (New Orleans): For the past eighteen months I have been at Carville, La. The only thing I would like to say is that the more you see of leprosy, the less you know. I began right away to use chaulmoogra oil and shortly after I started out I had the pleasure of reading Dr. Dimitry's paper in the *Journal of Tropical Medicine*.

Dr. Dimitry said he cured leprosy lesions by dropping the oil in the conjunctival sac and spraying the nose. I see about 100 patients every week, which in eighteen months is 9500, and I have used in 10 per cent of the cases chaulmoogra oil and have not observed any benefit. It is less efficacious than chloretone inhalant. I have found in punctate keratitis dronin gives the best results. Dr. Clyde Brooks, formerly of the University of Alabama, now with L. S. U. Medical Center, let me use his hemoprotein. I have found that to be quite helpful in inflammatory lesions of the eye. Leprous lesions of the anterior uveal tract almost invariably destroy the eye.

I had some communication with Dr. Hoffman of Havana, after reading his article in the *London Journal of Tropical Medicine*, in which he recommended gold very strongly. He said anyone who lost an eye in leprosy was culpable. I used gold on 18 cases without benefit.

So far as nasal lesions are concerned, most do have nasal lesions; leprosy attacks the cartilaginous structure. I have used chloretone inhalant with better results than chaulmoogra in 25 per cent to 30 per cent combined with benzocain.

There is not a great deal I can add to this discussion about leprosy. I think the treatment is absolutely symptomatic and so far chaulmoogra oil sprayed into the nose, it doesn't help, is my experience.

In Dr. Dimitry's paper, he failed to say how many cases he treated and the type. If he can be of any help to me—I appreciate his zeal and also read his paper in which he stated all eye lesions were associated with nasal lesions. In my experience, all cases with eye lesions do not have nasal lesions, that is macroscopically.

I had one nasal case in which I used chaulmoogra oil without benefit and the only way I could get the patient to breathe through his nose was with a preparation of cocaine and ephedrine. I have used chaulmoogra oil, but I am here to say that whenever the lesions hit the anterior uveal tract, the eye is lost. I certainly cannot agree with Dr. Dimitry in the cases I have had. I may be entirely wrong.

Dr. Sam C. Cohen (New Orleans): I have used chaulmoogra oil for the past few months in both nose cases and throat cases. In nose cases, I

used it with the hyperplastic type of case and can report very good results. I have used it pure and 25 per cent in Wesson oil as recommended by Dr. Dimitry.

In some eye cases I have used it and gotten very good results. I have been able to clear up several patients with marginal blepharitis after using chaulmoogra oil for a month or two.

In some tubercular laryngeal cases, patients come back relieved. I know that they have been relieved symptomatically, but so far as pathology is concerned I cannot yet make any statement. I have used it in some ordinary laryngitis cases also, with symptomatic relief. I am still using it 25 per cent solutions of Wesson oil and am satisfied with the results.

Dr. Theodore J. Dimitry (closing): It is not my desire to convey in this contribution any wonderful curative effect of a drug, but to submit facts of my investigation to you in hope that the oil might prove to be a most servicable remedy for conditions that it has not been commonly used in before.

The study came about in an attempt to show that the paraffin oils, when atomized into the nose, must be harmful because they merely coated with a non-penetrating oil the mucous membrane while the vegetable oils would be absorbed where so used, and would probably be beneficial. It was in my study of the various oils, their glycerines and fatty acids that I began the use of chaulmoogra oil for I had observed that it was beneficial in the nasal conditions of lepers, which gave the incentive for its use in other conditions.

I wish to thank Dr. Homer Dupuy, Dr. McNair, Dr. Bahn and Dr. Kahn for their discussion. To Dr. McNair I wish him to note particularly that I did not use the word "cure," and to Dr. Dupuy that I did not mention tubercular laryngitis in my paper. Dr. Bahn brought out most interesting information in the treatment of trachoma with the oil.

HISTAMIN IN ASTHMA.*

NARCISSE F. THIBERGE, M. D.

NEW ORLEANS.

The role played by histamin in allergic conditions is an interesting one. Our present results in a limited number, though so far not sufficient to draw definite conclusions, nevertheless, warrant this preliminary report.

Asthma, one of the varied manifestations of allergy, remains a fascinating study,

daily becoming better understood, well worthy, on account of the terrible sufferings it entails, to command our best efforts to relieve, and if possible to cure. The asthmatic reminds us of a geometrical cone delicately poised on its apex in unstable equilibrium ready to topple over: the sympathetic on one side and the vagus on the other finely tuned to preserve the respiratory balance. A normal person, represented by this cone resting on its base, does not require the opposing forces to be so accurately matched. A sudden whiff of pollen concentrated atmosphere, a vivid emotion, an indiscretion of diet or a retention of toxin, will not so easily elicit in him the paroxysm. Stimulate the vagus in the allergic, however, or depress his sympathetic, whether by the ethmoid, post-nasal or local or general route, the bronchioles are immediately narrowed, the ratio between inspiration and expiration is reversed and the struggle for air begins.

This struggle was recognized and described by the ancients. It preserved its mysterious horror up to the discovery of adrenalin and still remains only a partially solved problem of our modern time. As its pathology becomes better understood, here and there cases get well and remain well; our hope revives and "we carry on" with greater confidence. The main feature of allergic asthma is hypersusceptibility. Many features in asthma make us suspect adrenal. All admit, however, that toxemia is the determining element, whether insufficiency coming from a septic focus or from faulty metabolism.

The part of the arc, central, peripheral or reflex, attacked by the toxin is not the same in each case. As adrenalin acts at the neuro-muscular junction, we presume that the histamin-like body formed by the allergen in the cell may also have a similar location, though with opposite effect.

The mysterious and fascinating question which meets us in these allergic cases is why this toxin, whether itself the histamin-like body or its elicitor, may be present in the same measured quantity in two individuals and produce such anguish in one and

*Read before the Orleans Parish Medical Society, May 11, 1931.

not affect the other! Some explain it by an excess of potassium in the blood, some, a lack of calcium, while others accuse an extension of the pathological process from the nerve endings.

Whatever the explanation, we are sufficiently familiar with the clinical aspect to dispense with a description of the asthmatic attack or the sufferer. There is, however, an undoubted nitrogen retention which rises with the severity of the attack, with its duration or with its frequency of recurrence, as can be judged from some of the cases in our service at the Charity Hospital. (Chart 1).

more important. Where it has been possible to place an asthmatic, whose reactions were positive for wool, feathers and pollen, etc., in an atmosphere free from these, the problem was an easy one to solve provided secondary changes had not proceeded too far.

Adrenalin, despite later discoveries, still remains the most dependable for the acute attack. The action, prompt and widespread, is spectacular. The required dose is not large (0.25 to 0.35 c.c. of the 1:1000 solution) just sufficient to elicit a slight muscular tremor. Histamin has proved to be the antagonist of adrenalin in all its effect, being a vasodilator, a stimulant of the au-

CHART No. 1

Total N.P.N.....	34	33.3	92.3	46.7	42.8	42.8	34	46	46	30	42	66	48	45
Urea Nitrogen..	17	17	45	23	21	22	18	23	20	15	21	39	24	15
Creatinin	1.28	1.3	1.22	1.4	1.54		1.2	1.32	1.2	1.21	2.21	36	1.3	1.5
Uric Acid			2.5	2.5			2.2	2.35				2.64		2.7
Blood Sugar.....	92	86	80	92	78	83	95	76	75	15	74	105	86	17
Patient's Initial	G	C	T	H	W	C	S	G	B	K	L	N	N.C.	Normal

This chart indicates a marked retention in allergic asthma. The figures at the extreme right indicate the normal standard used.

The metabolic rate in these cases plays a minor part, if any. Where we found a minus, the case quickly cleared up with thyroid extract. The more severe, the more persistent the cases, the more closely to normal it seems one is apt to find the rate!

The diagnostic feature in asthma are: the allergic skin reaction, the appearance of the acute paroxysm more frequently at night (thought by some to be due to a cessation of the adrenals during sleep and the scant reserve in the blood), the eosinophilia, the hereditary history and the over distention of the air cells due to the inverse respiratory-inspiratory ratio.

The first requisite in the control of asthma is good elimination, not by purgatives but by exclusion of foods which acting as allergens, embarrass the kidney and the bowels. An occasional fasting day helps wonderfully. Sensible food hygiene should be enforced as to palatability, thorough mastication, quantity and interval. The elimination of inspiratory allergens is still

tonomic center, a constrictor of the bronchioles (here as well as in the liver and lungs histamin acts as a vaso-constrictor). The juices of all the digestive glands are stimulated, hydrochloric acid, pepsin, and saliva are all markedly increased.

For those interested in the composition and source of histamin, I quote the following:

“Histamin (ergamine), beta-iminazolyl-ethylamine, $C_5H_9N_3$ is one of the biogenous amines, thus a cleavage product of protein which is found in almost all animal tissues. Its liberation is due to the action of one or more of about thirty different types of putrefactive bacteria, among them, the ordinary bacillus coli. In the intestinal canal, histamin is present in considerable quantity, although towards the distal part of the colon it rapidly undergoes further decomposition.

“Histamin is produced in the living organism by the decarboxylation of the amino acids, and is related to the general nutri-

tion of bacteria, to the metabolism of the amino acids and to the pathology and pharmacology of the smooth muscle fibres.

"Other effects of histamin resemble the symptoms of surgical, traumatic or anaphylactic shock and are chiefly due to extreme vasodilatation. At the same time, there is considerable constriction of the bronchioles (Pal) and dyspnea."

Histamin base is extremely toxic, a few grains being fatal to man. Animals of 425 to 635 grammes died in anaphylactic shock on the administration of 0.00001 and 0.00005 grm. As high as 0.5 mgm of the dihydrochloride has been injected in man but the usual safe dose recommended is 0.25 mgm. We have used both the acid phosphate of histamin (ergamin) and the dihydrochloride (imido).

The flushing of the face even to the point of cyanosis, sensation of intense warmth and throbbing of the temples were particularly noticed in a vigorous man shortly after administering 0.30 c.c. of the 1.1000

solution. The process likewise is duplicated in the digestive track. Skiagraphs taken after administering histamin to an asthmatic whose previous examination had indicated gastric and cecal stasis showed rapid emptying of the stomach without pathology of the appendix. We would suggest this test in doubtful cases of appendicitis. The patient in this instance had been diagnosed as chronic appendicitis from the previous skiagraph. His asthma by the way, is greatly benefited. Histamin administered at the height of an asthmatic paroxysm intensifies it and elicits typical irritating cough. Administered in the interval in doses as small as 0.10 up to 0.50 c.c. we have noticed marked improvement in 3 cases. Another, the mother of 3 asthmatics, herself an allergic with digestive distress, was greatly improved, the pain and indigestion removed, color and weight restored and increased.

We wish to submit the following results from testing 19 cases: (Chart 2).

CHART No. 2

Name	Sex	Color	Age	Weight	Years Sick	Histamin	Timothy	Wool	Ragweed
M. A.	f	w	39	156	19	++++	0	++	+++
B. S.	m	w	45	156	3	+	++	++	0
B. L.	m	c	45						
A. B.	m	c	20		20	+	0	++	0
B. M.	f	w	35	150	20	0	0	++	0
C. P.						++	+	++	+
D. H.	f	w	27	130	17	+++	+	+	+
D. J.	f					+-	+	0	+
D. H.	m	w	30	175		++++	0	0	++
F. G.	m	w	41	120		++	0	0	0
F. O.	f	w	56	150		++++	++		+-
H. H.	f	w	32	105	18	++++	0		+
J. A.	m	w	44	140	4	++++	0		+
P. D.	f	w	23			++	+-	+-	+-
R. R.	m	w	51	145	2	++++	0	++	+
T. C.	f	w	40	155	3	++++	+	++	+
W. L.	f	w	45	180	23	++++	0	0	0
L. B.						0	0	++	+
W. M.	f	w	50	135	20	++++	+++		
K. A.	f	w	31	120		++++			
L. W.						+++	+-	++	+

The above chart indicates that no parallel exists between the skin reaction to histamin and pollen extracts. Histamin reaction may be marked where pollen reaction is negative and vice versa when histamin is negative timothy, ragweed or wool may be positive. Usually the more marked the reaction, the more quickly can the patient be relieved.

Believing in the theory lately advanced that the symptoms of allergy resulted from the dissemination throughout the system of an histamin-like substance formed locally by the cell when attacked by the specific allergen, we have made the attempt to desensitize patients with histamin. The number is yet too small and the cases too recent to be conclusive. This preliminary report is submitted as a suggestion to others to repeat the experiment. I cannot, however, caution too much on its danger and disagreeable results. The only annoyance so far experienced by us from using it in doses of 0.10 to 0.50 c.c. of the 1.1000 solution has been the marked engorgement of the neck vessels and aggravation of the cough and the distress when given in the midst of asthma. Adrenalin, however, controls it satisfactorily.

CONCLUSIONS.

This article is written solely to invite further research on the value of histamin as a non-specific desensitizer in allergic cases. The cases so far are too few and have not been under treatment sufficiently long to indicate positively that the improvement will become permanent.

Cases of asthma connected with digestive symptoms promise better results.

Histamin given during the asthmatic seizure aggravate the cough and the distress. Adrenalin here administered brings instant relief both from the asthma and the histamin. Histamin being extremely toxic, should always be administered intradermally in initial minute doses.

No direct parallel has been found to exist between the reaction of histamin and the reaction from grass wool or ragweed. In cases where marked allergy to pollen exists, histamin reaction may be negative; and vice versa. The most constant approach to parallelism is that with wool. The improvement following its administration is in direct ratio to its reaction; the greater the skin reaction, the quicker the relief.

DISCUSSION.

Dr. J. Holmes Smith: Dr. Thiberge's paper is of quite some interest to me because, for some five or six years, I have been using histamin diag-

nostically in the diagnosis of achylia rather than therapeutically.

It would seem that his position in using it as a therapeutic aid is not badly taken. As long ago as 1924, Thomas Lewis advanced the idea that urticarial wheals were due to a histamin-like substance in the skin. Since then, histamin has become associated with various types of allergy. Recently there is on record a case of periodic edema of the hand which had been in existence for a number of years and which failed to respond to any form of treatment. The authors resorted to small doses of histamin given frequently during the intervals. The patient would have the edema for a week and be free for a week. During the intervals, small doses of histamin were given over a long period of time. Ultimately very satisfactory results were obtained, the patient being free from the edema for a long period.

Several things in Dr. Thiberge's paper I think are rather important, particularly the fact that his best results were obtained in those cases having gastro-intestinal symptoms. It is believed by many that the intestinal tract is probably the source of histamin, it being formed by the action of many types of bacteria on protein, in the colon particularly. I want to cite a case which I have seen in recent months. A young man, the brother of a patient of mine, about twenty-two years of age, had since childhood been troubled with asthma. The patient, in talking to me about it, stressed strongly that it seemed to be associated with the gastro-intestinal tract. Gastro-intestinal study showed a slowing up at the ileo-cecal valve.

The young man has been instructed to eat less, with no particular reference to the type of food, and has gone on a partial starvation diet. When he does not overeat, he has no asthma; and, when he has asthma, if he takes an enema, he gets relief. Whether or not there is any connection between his asthma and histamin I do not know, but it occurs to me that there may be a mechanical feature or reflex nervous feature also.

I wonder if treatment of the gastro-intestinal condition would not help as well as would histamin. We have been using a preparation known as dihydranol. I am not recommending it myself, but it is claimed to overcome putrefaction ultimately, and, if putrefactive bacteria have anything to do with it, it might not be a bad idea to send some of Dr. Thiberge's patients to our clinic and try out the treatment of the intestinal tract possibly before the histamin is given.

Dr. Allan Eustis (New Orleans): It is very gratifying after twenty-two years to hear the question of the relation of histamin to asthma revived. Of late, numerous articles have appeared in the literature suggesting that hista-

min is a factor in the causation of asthma and urticaria, all advocating desensitization of the individual by administration hypodermatically of this base in the interim between attacks. Few of these writers have gone back far enough in their research of the literature to have got at the basic principle of this relationship.

Some of you may recall that in 1909 I reported nineteen cases of asthma relieved by treatment of the associated intestinal toxemia, while, in 1912, I reported the result of some researches carried out in Vienna, in which I was able to show that experimental asthma, as well as urticaria, can be produced by histamin. At this time, this base was recognized as beta-imidazoleethylamin, and, inasmuch as it was isolated by Barger and Dale from extract of ergot, it was marketed as ergamin. Ackerman, as well as Mellanby and Twort, showed that this base was formed from histidin by putrefactive processes and the splitting off of CO₂ from the carboxyl radical of histidin, so that it was referred to subsequently as histamin to designate it as the amin which is derived from histidin, just as paraoxyphenyl ethylamin is designated as tyramin on account of its derivation from putrefaction of tyrosin.

Histamin is one of the amino-acids formed on digestion of all proteins in varying amounts, depending upon the particular protein digested. Sturin, the protein of fish, is very rich in histidin, containing 12 per cent of same, which accounts for the tendency of shell fish to produce urticaria, as well as asthma, in certain individuals. The logical treatment of these conditions, therefore, is to limit the ingestion of histidin to a minimum, at the same time resorting to measures to relieve the putrefactive processes in the intestinal canal so as to prevent the transformation histidin, a non-toxic substance, into histamin, a toxic one. I often teach my patients to make tests for indican in their urines, and they are able thus to control their diet. I believe the results obtained compare favorably with those obtained by any other method.

I do not wish to be understood as decrying the value of determining the particular antigen, or allergen to which the patient is susceptible, either by intradermal tests, or eliminative diets, but I wish to stress the importance of considering the presence of intestinal toxemia with regulation of the diet as to its histidin content during these investigations, or during the period of desensitization.

One may very aptly ask, "Why will one patient with a heavy indican test manifest symptoms of asthma, while another, under similar conditions be free from symptoms?" I was able to demonstrate in 1914 that the liver of the ordinary turkey buzzard contains a ferment which is ca-

pable of breaking up histamin and rendering it inert, so that it is reasonable to suppose that the normal individual has a turkey buzzard liver, while the asthmatic individual has a guinea pig liver.

Therefore, I say, during the process of desensitizing the allergic individual, whether by injection of specific protein, or by histamin injections, let us not forget the influence of absorption of histamin in large amounts under certain conditions from the intestinal canal, over the ability of the liver to detoxicate it.

This desensitization work by means of injections of histamin, recently advocated by several others, as well as by Dr. Thiberge, interests me very much, and can be explained probably by observations made many years ago, as mentioned above.

In producing experimental asthma by injections of histamin, it was found that animals varied in their susceptibility to the toxic effects of this base. The guinea pig was especially susceptible, while the dog was relatively immune to its toxic effects. It takes five times the dose of histamin to produce asthma in the guinea pig, when given hypodermically, or when introduced into the peritoneal cavity, as when given intravenously, or when introduced directly into the trachea. It is evident, therefore, that all of the tissues have a defensive mechanism against its action just as the liver has. It is possible by frequent small injections to raise the immunity against histamin as obtains with other antigens. If such is the case, why does not the asthmatic develop his own immunity? Some do. We often find patients "outgrowing" their asthma, or being promptly relieved by drainage of a sinus, or removal of an abscessed tooth, so that they can come in contact with antigens to which they were formerly sensitive without showing any symptoms.

Dr. A. L. Levin (New Orleans): It is not clear in my mind yet as to how histamin relieves asthma.

Dr. Thiberge evidently speaks of the use of histamin in the allergic group. If histamin, according to his statement, acts as a vaso-constrictor, how does it relieve asthma? The condition should be aggravated by it unless we assume that histamin acts as a desensitizing agent. Is it a mere hypothesis or has it been proved that histamin acts as a desensitizing agent?

I am endeavoring to give a new explanation for the action of histamin in asthma. It probably acts as an agent to stimulate the adrenalin functions in the body. In other words, under its influence, more adrenalin is manufactured by the adrenals and the excessive amount of adrenalin relieves the asthmatic condition. Adrenalin, we know, is so far the best remedy to give asthmatics relief. A similar action of histamin in in-

fluencing the production of hydrochloric acid can probably be explained on the same hypothesis. Sajous asks the question, "How is achylia gastrica produced?" His answer is as follows: "We know that achylia gastrica is met with in a number of diseases whose origin is infection; such as polyarticular arthritis, chronic gastritis, chronic biliary infection, etc. The infection existing in the body at first causes a hyperproduction of adrenalin by irritating the adrenals through congestion. The excessive adrenalin in the body causes a congestive constriction of the arteriols in the pyloric area, increasing thereby at first the production of hydrochloric acid. As this process goes on, it eventually tires out the peptic glands or they are choked out by the connective tissue formation due to chronic congestion. The hydrochloric acid then disappears."

Taking this explanation as a basis, I reason that the influence of histamin in bringing out more hydrochloric acid is probably due to its influence on the adrenalin production as mentioned before and the same applies to the value of histamin in the allergic types of asthma.

Dr. I. L. Robbins (New Orleans): There is not anything I can discuss about this, but there are several questions I might ask Dr. Thiberge.

First, you spoke about the improvement that was noted. How long have you had the patients under observation? In what way were they improved? Were the intervals between the attacks lengthened or was the severity or the length of the individual attack diminished? Have they received any other treatment while being observed under treatment with histamin? Have the patients lived the same sort of lives as previous to the beginning of histamin treatment, or have their habits of eating been changed?

Dr. Thiberge (Closing): It seems that the allergic patient has a lower level of assimilation than the ordinary patient, this to my mind calls for diet regulation. The allergic can assimilate a definite amount thoroughly. Overstep that quantity and digestion is incomplete. The digestion of protein especially is not perfect, allowing amino-acids to penetrate into the tissues; the food then becomes a poison, a foreign body, and an irritant.

I will be interested in the effect of dihydranol in suitable cases which Dr. Smith has volunteered to handle. I fully appreciate the service and the help which the medical clinic has given the aller-

gic clinic in the past. The study of intestinal flora in relation to asthma will form an additional bond between the clinics.

I wish to accord a well merited priority in the study of histidin and histamin to Dr. Eustis. His past work and writings along these lines are a credit to the Society. I realize with him that a volume of work has also been done in this line by a number of other workers, as can be judged by the attached bibliography. His researches, however, were made from a different angle. It is a well admitted principle to limit the ingestion of protein and insist on a certain hygiene on account of the low assimilation level. Dr. Eustis has spoken of fish protein. It is a curious fact that the less fish is cooked, the less harm is done the allergic. Explanation of this phenomenon so far is not clear, no more than the fact that the cat is resistant to the effect of histamin while the guinea pig remains extremely susceptible to it.

In insisting on good assimilation and correction of intestinal putrefaction, Dr. Eustis has not laid enough stress on the possible sources of histamin in distal parts. The histamin-like body of which we spoke, and which is found in the tissue of the nose, skin, bronchial tree, etc., does not all come from the intestinal tract but is the expression of the fight in situ between the tissue cells and the allergen. It, therefore, becomes a question not of changing the character of the intestinal culture medium, but a question of desensitizing the tissues or of neutralizing the poison widespread in the body. It is a general as well as a local fight. The body is gradually trained to tolerate fairly large doses of the histamin-like body by raising slowly that dose of histamin injected.

Dr. Levin's question as to how histamin acts has been answered by Dr. Eustis. I desire to stress the antagonism between adrenalin and histamin. The data now available point to the neuro-muscular junction as the seat of action for adrenalin; we presume that histamin is carried there to oppose and reverse its action.

In answer to Dr. Robbins's question: the cases were under observation and treatment for two months. The doses given were from 1/10 to 1/2. Cases selected were refractory for years to all other treatment. Diet and hygiene were kept as usual but all other treatment (hypo) except histamin was suspended. The result so far has proved very satisfactory.

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AN APPRECIATION.

The members of the Louisiana State Medical Society owe a debt of gratitude to the members of the Committee on Public Policy and Legislation who have been most active in securing the passage of some excellent new bills in the Louisiana Legislature, and who have been responsible for the probable repeal of the annoying and unfair physicians' license tax. Members of this Committee are Dr. C. A. Weiss, Chairman, Baton Rouge; Dr. Foster M. Johns, Vice-Chairman, New Orleans; Dr. Glenn J. Smith, Jackson; Dr. Roy B. Harrison, President, New Orleans, and Dr. P.

T. Talbot, Secretary-Treasurer, New Orleans. They have worked in conjunction with the Committee on State Medicine and Legislation of the Orleans Parish Medical Society, of which Dr. C. Grenes Cole is the Chairman. They have had whole hearted cooperation from the medical profession throughout the State. Physicians from nearly every parish and district organization have taken the time and trouble to go to Baton Rouge and to help President Harrison and Dr. Weiss, Chairman of the Committee.

What has been accomplished by all these gentlemen illustrates very well indeed what may be done under efficient leadership with all members of the State Society getting back of their leaders and working. This has been accomplished at a great sacrifice by many men. Surely the results warrant the loss of time and money that these unselfish members of the State Society have suffered. Each and every Louisiana State Medical member is in their debt. Likewise every medical man in the State who does not belong to organize medicine will benefit from the efforts of those who are joined together for a common purpose: furthering the high principles of medicine and medical practice.

THE DOCTOR, TAXES AND THE VETERAN.

The ever increasing and steadily mounting taxes assessed against the citizens of the United States gives them cause for much thought and a not inconsiderable amount of worry. When it is realized that slightly over thirty per cent of the national income last year was devoted to taxes to pay for city and town, parish and county, state and national expenses, it gives cause for deep reflection as to just when this rising expense of running our government will ever stop. The average physician has a tendency to dismiss this big problem of enormous taxes with the thought that it touches him but slightly. When he comes into immediate contact with the payment of taxes and tax collectors he may feel some

irritation at the minor levies and probably disgust if he owns real estate and has to pay a sum out of all proportion of the present day value of the land, but fails to realize in indirect taxation he is also paying the bill. It is all right to say that the railroads, the corporations, and the wealthy are paying the bulk of the taxes. That is true directly, but indirectly these same taxes come back to the individual in increased cost of freight rates, public utilities, added expense of individual items and what not. Paying three cents where two cents formerly sufficed for a letter, paying more for soft drinks, for tobacco, may seem but very small items, yet on the contrary they mount up to a reasonably large portion of the doctor's income. With the new federal and state taxes on gasoline, the cost of gas alone is thirty-three and a third per cent higher than it would be without such taxes. This is one of the few direct levies which is paid for by the individual.

In considering what can be done by an individual doctor or the medical profession as a whole to combat these tremendous demands upon the physician's income, demands which are so great that they represent turning over to the government approximately the income from one hundred or more odd working days a year, thought should be given to that branch of the government in which the medical man is primarily interested, that is to say the care of the sick veteran. The New York Academy of Medicine has estimated that \$450,000,000 a year could be reduced from federal expenditures to those who are not suffering from war disabilities. The payment of compensation for those who were in the war but whose injuries or disabilities are in no way dependent upon war services is absolutely ridiculous. This organization points out among other things that a larger percentage of former medical officers are being pensioned than any other former officer. Many of these men hold full-time government positions and are receiving comfortable salaries, yet are receiving large sized checks every month for compen-

sation. Compensation should not be paid to those who are not in need nor to those whose earning capacity is not materially lessened by post-war injuries. Certainly it should not be given to those men who make a living which is adequate to support them in comfort and even luxury.

If the taxpayer were to think in concrete terms of how his money is spent, probably he would be more disturbed than he now is by the payment of taxes. If a doctor whose income is \$3,000 or \$4,000 a year were to visualize specifically where the \$1,000 or more that he pays directly or indirectly as taxes are being spent, he would not feel quite as reconciled to the payment of taxes as he does. Were he to say to himself that "my \$1,000 is going to fatten the income of So and So who is a partial or full time employee of the Veterans' Bureau, who sprained his back playing golf, or doing what not, as a result of which he is getting a yearly pension which is represented by the money that I pay," certainly a feeling of anger, disgust and revulsion would arise in his mind.

THE FEVER OF HEART FAILURE.

Fever occurs frequently during the course of heart disease. The attempt to explain the causation of this fever has not been by any means wholly satisfactory. The fever of heart failure has usually been attributed to infection or to pulmonary infarction. Neither of these two explanations explain; no evidence of infection can be found in many instances in a patient with heart disease who has fever, and no sound proof is obtainable when infarction of the lung is present. In view of the fact that the fever disappears so promptly with the return of the heart to normal, it would seem that some circulatory disturbance was responsible for the fever rather than the two suggested causes. In order to study the problem Steele* selected a certain number of patients suffering with heart failure who

*Steele, J. M.: Fever in certain cases of heart failure, *Proc. Soc. Exper. Biol. and Med.*, 29: 991, 1932.

were placed in a room of constant temperature; simultaneously measurements of the temperature of the surface (skin) and of the interior (rectum) of the body were made. The temperatures of the skin were estimated by means of a copper constantan thermocouple, the temperature being taken every two hours.

It was found that uniformly during heart failure skin temperatures, particularly the temperatures of the extremities, were lower than after recovery, whereas the rectal

temperature was higher before the patient recovered from the heart failure. After the failure had subsided the two temperatures were very close to each other, whereas during heart failure considerable difference existed between the two. The author states that the natural inference to explain the differences between the two temperatures is that there is difficulty in distributing properly the heat which is produced within the body when the circulation is embarrassed by the failing heart.

HOSPITAL STAFF TRANSACTIONS

TOURO INFIRMARY STAFF MEETING.

The regular clinical meeting of the Medical Staff of Touro Infirmary was held on Wednesday, June 8, 1932, at 8:30 P. M. Dr. Urban Maes presided.

The first order of business was a motion picture demonstration of the larynx under suspension laryngoscopy, presented by Dr. F. Lejeune. A series of motion pictures of normal and pathological larynges made by Dr. Lejeune were shown.

Drs. Weil, Joachim, and Fuchs discussed the presentation, all stressing the value of such permanent motion picture records of pathology, and complimenting Dr. Lejeune upon his technical skill in obtaining such excellent views.

Dr. E. Denegre Martin then showed motion pictures of four cases of fracture of the hip, to show the end results obtained in such cases by the use of screws to repair the fracture. Dr. Martin has been advocating such a method for many years. His oldest case was done 10 years ago and his most recent patient was handled in this manner 2 months ago. He emphasized the simplicity of the method, the short period of disability and the degree of restoration of function, practically perfect in those cases shown.

Dr. Russel Stone discussed the presentation. He stated that he had used the method and thought it the simplest and best method available for such fractures.

Dr. Hatch, however, stated that he totally disagreed with Dr. Martin. He expressed himself as opposed to the open method of reduction and treatment, and advocated the Whitman method as the best and the one of choice. He said that he did not believe the method advocated by Dr. Martin should be accepted as the method of choice in all cases.

Dr. Martin closed the discussion by presenting an elderly patient so treated. This man had practically perfectly restored function, and it was impossible to state which hip had been fractured.

Dr. Martin has successfully treated 30 such cases, 12 of them being elderly individuals.

The next case was shown jointly by Dr. Henry Blum and Dr. A. I. Weil. This case was one of orbital cellulitis with the following summarized record. The patient was a young white male who came to the Touro Clinic complaining of pain in the left eye. When seen by Dr. Blum he had severe pain in the left eye with swelling and definite exophthalmos of that eye. He gave a history of having been struck in that eye by a pebble while riding the previous day. Close examination failed to reveal any evidence of injury of the eye whatsoever. There was no history of any nasal symptoms. Vision was normal, as were also the eye grounds. There was definite limitation of motion of the eye ball and considerable pain around the eye. A roentgenogram of the orbit did not reveal any foreign body. An examination in the ear, nose and throat clinic was negative at that time, but later another examination made by Dr. Weil showed polypoid changes in the nose. A roentgenogram revealed opacity of the left ethmoids. Dr. Weil advised operation. This was done the following day. The temperature fluctuated between 100°-102° F. There was leukocytosis, and morphine was required to relieve the pain. Dr. Weil expressed the opinion that the para-nasal sinus infection did not cause the eye condition. There was also evidence of chronic changes in the right frontal sinus. Following the sinus operation Dr. Blum applied leeches to the area around the swollen eye, and Dr. Weil thought that this was what cured the condition. Dr. Blum, however, thought that the orbital cellulitis was secondary to the ethmoid infection and that Dr. Weil's operative procedure relieved it.

Dr. Joachim discussed the case and stated that, in view of the contradictory evidence, he felt that perhaps something had been overlooked or not accounted for.

Dr. Kearney reported having had two such cases of orbital cellulitis in the past year, both due to para-nasal sinus infection. One case resulted in an orbital abscess which necessitated drainage.

Dr. Blum reiterated his opinion and stated that he had attached little importance to the history of a blow to that eye. He thought the prompt recovery of this non-suppurative process was unusual.

Dr. Landry offered the suggestion that this might have been thrombo-phlebitis. He had seen the case prior to operation and had suggested the use of leeches as used and recommended by the French in thrombo-phlebitis.

The history, clinical course and autopsy findings of a fatal case of acute nephritis following pyelography was then presented by Dr. W. A. Reed and Dr. I. I. Lemann. The case had been thoroughly followed and studied by Dr. Gonzales, Resident in Urology, and Dr. Cameron, Resident in Medicine. Dr. Cameron presented the case record, summarized below.

The patient, a white male, aged 32 years and weighing 200 pounds, had visited the Touro Clinic April 12, 1932, complaining of pain in the left side of his upper abdomen. This had been present for one and one-half years and had been associated with belching and gas. The pain was not related to meals and was not relieved by alkalies. He stated that it was relieved by belching. There were no urinary disturbances and no other complaints at that time. He had lost about 25 pounds in the previous year and a half. His physical examination was negative as were also the Wassermann, urine, gastro-intestinal series, gastric analysis and stool examination. He was treated in the gastro-intestinal clinic for two months with no improvement, and was then referred to the genito-urinary clinic on May 18, 1932, for investigation of the left kidney and ureter for possible calculus or kink. Examination made in the genito-urinary clinic showed nothing except pain over the left lumbar region. Two days later he was cystoscoped and a pyelogram made. The bladder was normal, there were no kinks nor stasis on either side. The pyelogram was made by injecting 5 cc. of a new solution containing bismuth. This solution had been used in six previous cases without ill effects. The pyelogram was reported negative. The cystoscopic urine showed several pus cells from the left kidney. The patient had no reaction until about four hours later when he returned to the clinic complaining of severe pain in the left kidney area with nausea and vomiting. He was given a sedative prescription and advised to remain in bed and drink lots of water. He was not seen again until five days later when he returned to the clinic stating that he had urinated about a pint of urine the day the pyelogram had been made but since that time he had passed only a few drops of blood. He complained of weakness and

vomiting. Catheterization yielded no urine. He was admitted to the hospital. The physical examination upon admission showed some edema of the eyelids and face, carious teeth, markedly inflamed throat, cervical adenitis and generalized abdominal soreness. The renal areas were not tender to pressure and the kidneys could not be palpated. The blood pressure was systolic 150, diastolic 90; pulse 84, temperature 98.6° F. He vomited several times and received infusions of glucose and saline. That night he urinated 5 cc. of pure blood. On the second day he urinated 30 cc. of pure blood. His blood chemistry showed N.P.N. 200, creatinine 6, uric acid 11, dextrose 117, chlorides 275 and CO₂ 20.8. Dr. Lemann, called in consultation, found a fetid breath, blue line on the gums, leukoplakia, moderate edema of face, moderate ascites, perfect orientation, clear mentality, and expressed the opinion that it was a case of heavy metal poisoning. The patient continued to urinate blood, and continued to vomit. The total non-protein nitrogen rose to 240 mg. The hemoglobin was 90 per cent, leukocytes 13,000 with a normal differential count and no stippling of the red cells. A radiogram of the urinary tract showed no further opaque material present, but the kidneys were said to be enlarged, especially the left. He continued to void bloody urine in small quantities. Pulmonary edema developed on the fourth day, pulse became irregular and blood pressure rose to systolic 175, diastolic 100. On the fourth day his temperature rose to 101° F. On the fifth day his leukocytic count rose to 31,000 with 99 neutrophils, though he seemed some better. On the sixth day the non-protein nitrogen was 320 mg., dextrose 166, chlorides 275. That night he died unexpectedly, apparently of cardiac failure. An inquiry addressed to the drug company manufacturing the opaque media supplied the information that the solution contained 6.6 per cent potassium bismuth tartrate. The lethal dose was given as 200 mg. per kilo body weight in rats. This patient had received 325 mg. or 4 mg. per kilo body weight. This solution had been used for cystograms in dogs and humans in the Mayo Clinic with satisfactory results.

Dr. John Lanford then presented the autopsy findings in the case. The heart was dilated, especially the right side. There were edema of the lungs, lobular pneumonia and an enlarged congested liver. The spleen was congested. The kidneys showed a glomerulo-nephritis grossly. The pancreas was hard and fibrous. The mucous membrane of the stomach was injected. The ileum showed irregular patches of congestion, with blood. The cecum and ascending colon showed congestion, ulceration and degeneration. The descending colon was injected. Histological examination showed hemorrhages under the capsules of the pelvis and the kidneys. There was no blood in the tubules and little changes in the glomeruli,

mostly in the collecting tubules. There was some evidence of foreign matter present.

Dr. Reed stated that only 5 cc. of the solution had been used, without pressure. He did not understand how the pyelogram could have been responsible for the fatality. The drug probably stayed in the pelvis not longer than two minutes. He offered the suggestion that perhaps the acute throat condition found in the initial examination was responsible for a severe toxemia which had produced the fatal nephritis. He recalled seeing five such cases of acute nephritis recently, apparently due to a severe streptococcal sore throat. He stated that 5 or 6 other cases had received the same drug, and in one case a bilateral pyelogram had been made. All these were without any ill effects.

Dr. I. I. Lemann discussed the case, saying that he had thought the condition an instance of heavy metal poisoning because of the blue line on the gums and the anuria. On the other hand, the amount of heavy metal used was a very small amount and in a state not usually toxic, so that it was difficult to believe it responsible. He thought the post mortem findings in keeping with those of heavy metal poisoning. Certainly there was evidence of an acute nephritis due to a fulminating toxemia, hardly evidence of any bacterial involvement. The lobular pneumonia had been a terminal condition.

Dr. Simon suggested the possibility of an acute food poisoning and said that he did not think the pyelogram responsible.

Dr. Lanford mentioned the possibility of diphtheria. Certainly there was evidence of an acute peculiar toxic process which he could not identify further. Examinations of the intestines had failed to show any bismuth present.

Dr. J. Cohen raised the question as to what could have happened to the patient during the four days at home, not under observation.

Dr. Urban Maes reported a case operated for a marginal ulcer two months previously, upon whom a posterior gastro-enterostomy had been done 22 years before at the age of 2 weeks for congenital pyloric stenosis. The pylorus was found to be perfectly normal and patent. The gastro-enterostomy was eliminated and a jejunostomy done. The patient had gained 22 lbs. since operation.

Dr. Lanford rose to compliment the program committee upon the excellent meetings furnished during the year.

The Staff then adjourned for a three months vacation.

Following the meeting refreshments were served and enjoyed.

Willard R. Wirth, M. D.

HOTEL DIEU STAFF MEETING.

The meeting of the Hotel Dieu Staff was held on Monday, May 16, 1932, at 8 p. m.

Dr. Lucien A. LeDoux presented a case report demonstrating the Gynecological Aspect of Symptomatic Epilepsy. This was discussed by Drs. R. Unsworth, M. Couret, J. E. Landry and G. C. Anderson.

Dr. Unsworth: "Apparently there is a definite relationship between pelvic pathology and central nervous system syndromes. This appears often with ovarian dysfunction; certain uterine conditions also influence the psychotic female. The etiology of convulsive seizures is uncertain. A detailed study of each case is desirable."

Answering Dr. Couret's question as to the differential points between early epilepsy and hysteria: The epileptic loses consciousness, whereas the hysteric feigns unconsciousness and the convulsive movements are usually purposeful.

Dr. Landry mentioned a case of double pyosalpinx, where a bilateral salpingectomy was followed by epileptic seizures. Treatment by giving large doses of bromide and much ovarian and thyroid extract failed to produce the desired results.

Dr. Anderson: "This case illustrates the modern trend in connection with epilepsies. In all probability the spasmodic state is a syndrome rather than an entity, and it is the hope of those interested in this line of work that eventually the term "idiopathic epilepsy" may be dropped from medical nomenclature."

Dr. Frank Chalaron presented a case report of Infantilism and Double Hydroureter and Hydronephrosis: A white male aged 28 years, married, referred with diagnosis of severe cystitis and neurosyphilis.

History: Two months previously he had vague pains throughout the body with some urinary difficulty. Following a one plus blood Wassermann, diagnosis of cerebro-spinal lues was made. He was given three doses of neosalvarsan at weekly intervals and a preparation of mercury by mouth. After the third dose of neosalvarsan he suddenly went into a coma which lasted two days; he also developed ptialism. It was claimed then that he had a paralysis of the bladder.

Physical Examination: Shape of body, arms and face markedly feminine in type; genitals infantile; both testicles undeveloped; pubic hair scant; voice high pitched and juvenile; severe pyorrhea; teeth are bad and some show abscesses of the roots; all reflexes normal. Cystoscopy: Urethra admits a No. 18 Fr. cystoscope with difficulty; bladder small with highly inflamed mucosa and contains foul, bloody urine. Ureteral openings of golf hole type; both ureters catheterized; right urine showed pus, albumin, B. coli; left urine blood, pus, albumin 2 per cent, B. coli. Blood Wassermann negative. Spinal fluid Wassermann negative up to 2 c.c., cell count 6, globulin nega-

tive, colloidal gold negative. Later a cystogram showed a conical bladder, hydroureters, hydronephrosis. A second plate, taken 15 minutes after removal of pyelographic medium by catheter, showed retention in left kidney pelvis. This case was reported to emphasize the danger of administering arsenicals on an insufficient diagnosis.

Dr. R. L. Gordon: Three points of this case seem very clear to me. First, the man probably never had syphilis—a one-plus Wassermann is never conclusive. Second, three doses of neosalvarsan with apparently no urinary examination caused the so-called paralysis of the bladder, which was nothing but acute nephritis; he failed to urinate because the bladder contained no urine. Third, as to infantilism: He has a stricture of the urethra of long standing; Dr. Chalaron states that the size of the channel was a No. 18 Fr.; this is analagous to a stricture of that caliber. At first there was compensatory action on the bladder muscles; as years passed the muscles could get no stronger, which caused atony of the bladder. The next step, of course, was hydroureter and hydronephrosis.

Dr. P. L. Thibaut read a paper entitled "Podalic Version."

"The recent visit of Dr. I. W. Potter, who champions this method of delivery, leads me to promote this discussion.

"In exploring the uterine cavity, we cannot expect the same degree of asepsis as in abdominal surgery because of the necessary primary invasion of the vagina. However, the pelvis is peculiarly well equipped to resist infection; besides, in the parturient woman, the work is done in the amniotic cavity. In thirty years of performing podalic versions not once have I had cause to regret it. I do not recommend the procedure indiscriminately; but, when indicated, it has often been the means of avoiding abdominal sections.

"Version is indicated in cases of: (a) Failure of the fetus to engage—the other alternative being the undesirable high forceps; (b) transverse presentations of every character; (c) occipitoposterior presentations except when the fetus is small and the pelvis roomy; (d) occipital presentations where internal rotation and extension have not occurred and the application of forceps would be difficult. (In these cases it is indicated only when the presenting part can be pushed back above the pelvic brim without difficulty.)

"Potter's technic is best, in my opinion; particularly the bringing of both feet together. I never attempt to cross the arms of the fetus on the chest before turning, my experience being that delivery of the anterior shoulder as soon as the lower angle of the scapula has passed the vulvae will save any possibility of extending the arms above the head. Detaching the sac high before puncturing the membrane, with the idea of preserving

as much amniotic fluid as possible, is dangerous because of the risk of detaching a low-implanted placenta and causing hemorrhage. Unless the child is small, it is better to deliver the head with forceps. Version should not be performed without full dilatation of the os, surgical anesthesia, and catheterization.

"Modern civilization tends to the development of the mental rather than the physical; this will result in greater difficulties in the mechanism of labor as times goes on. The lowering of our mortality rate in obstetrics depends on the future conduct of our medical schools in properly fitting their graduates to meet the difficulties they will encounter."

This paper was discussed by Drs. J. E. Landry and L. A. LeDoux, who agreed on the excellence of Potter's technic, and the advisability of performing this operation in well defined cases rather than reserving it for a "Do or Die" procedure.

Dr. R. S. Unsworth stated he believes many feeble-minded problems may be laid to the obstetrician. The unusual trauma caused by improper application of forceps may produce severe cerebral hemorrhage, and should be avoided not only for its immediate effects, but for the sake of the central nervous system.

Executive Session followed, after which the meeting adjourned.

KING'S DAUGHTERS' HOSPITAL STAFF MEETING.

Greenville, Miss.

The regular meeting of the staff of the King's Daughters' Hospital was held at 7 p. m., June 8, 1932. Supper was served, immediately followed by the regular program.

The meeting was opened by the chairman of the staff, Dr. John Archer, and the following members were present: Drs. White, Dickens, Paul Gamble, Beals, Davis, Lewis, Lucas, Archer, Wilson, Hugh Gamble, Pegues, Shackelford, Acree, Payne, Montgomery, Eubanks, Thompson, and Beck of Greenville, and Dr. J. F. Simmons of Skene, and Dr. C. W. Patterson of Rosedale.

After reading of the minutes of the previous meeting, the activities of the hospital for May were taken up and discussed.

Beginning with this month's report, the hospital's admissions, diagnoses and routine reports were given on the new form suggested by the American College of Surgeons, and in the opinion of those present was an improvement over the old manner of reporting hospital activities. Other routine business was taken up and disposed of.

The president reported that Dr. Poore, inspector for the American College of Surgeons, had made his yearly inspection of the King's Daughters' Hospital, and again gave our hospital a Class A rating, since we fulfil all requirements. He had

suggestions to make of a minor nature, one of which was the substituting of the American College of Surgeons' form for our method of reporting the hospital's activities.

A case report was given by Dr. J. A. Beals on "Erythroblastic Anemia," illustrated by roentgenograms and charts of numerous blood counts, the range of temperature, hemoglobin, and weight curves. This paper was discussed by Drs. Wilson, White and Patterson, the discussion being closed by Dr. Beals.

A paper was given by Dr. A. G. Payne on "Appendicitis with Operative Technic and Complications." This paper was discussed by Drs. Hugh Gamble, Hirsch and White, the discussion being closed by Dr. Payne.

The health report for the month of May in Washington County was read by Dr. Shackelford, Washington County's health officer, after which it was decided this was to be a feature of our monthly meetings.

Adjournment.

Appendicitis.—Dr. A. G. Payne.

Case History—Patient: a well developed white man, aged 32 years, single, saw-mill laborer, admitted to hospital April 15, 1932.

Present Complaint: Severe pain in abdomen around umbilicus and in left lower quadrant, fever, nausea and vomiting of three days duration. Past History: On April 19, 1931, was taken with severe pain in pit of stomach and on left side, high up. Was taken to hospital but continued to grow worse. On April 20, was operated upon, wound draining for 93 days; remained in hospital for 55 days. Had similar attacks ever since. Last January was in bed with one for ten days and has had lighter attacks since. At time of an attack would take large doses of purgatives to keep going. Has had some pain at all time. Examination: First seen by Dr. Eubanks on April 13, 1932, with severe pain in abdomen, chiefly in left lower quadrant, chills, fever, nausea and vomiting. Had had ten large loose stools in period of two hours on the day previous. Abdomen tender, rigid; was unable to palpate. There was large smooth scar over McBurney's point. In view of previous history a diagnosis of intestinal obstruction was made. Patient refused operation. Was seen again on April 15, suffering with same symptoms, and sent to hospital for operation. Laboratory findings on admission: Leukocytes, 14,500; neutrophils, 80; small lymphocytes, 16; large lymphocytes, 4; hemoglobin, 80; R. B. C., 4,500,000. Urine: acid, albumin 1-plus, many granular casts, otherwise negative.

Operation—Right rectus incision was made under spinal anesthesia at 8:30 P. M. Free pus was found in abdominal cavity, omentum wrapped around small bowel, omental bands around large bowel. Ascending colon attached to ileum, many adhesions on right side. All tissues very friable;

large, dark red ruptured appendix. Omental bands loosened, intestines separated from adhesions, appendix removed, stag drain on right side. Progress: Uneventful, remaining in hospital for 20 days.

Discussion: This case history should call to our attention a very important fact; that is, that in this country we are experiencing too great a morbidity and mortality rate in appendicitis. Purgation and delay in making an examination are the greatest factors causing this high rate of mortality. Ill advised operations at a time not safe for the patient and too many operations being done without the surgical skill and judgment being used that would enable a very sick patient to survive the operation are also important factors. Again, there is not always used the simple technic which would be for the best interest of the patient. The simple matter of the proper incision may mean so much in the welfare of the patient. We should be guided in this respect by the symptoms presented and the external findings of the abdomen as to whether it is best to make a mid-line, right rectus or McBurney's incision. A great deal, too, depends upon the simplest way of handling the appendix. In all types of appendices and their removal, in my opinion, the simple ligation of the meso-colon, tying off of the appendix, cutting away the appendix, cauterizing the stump with carbolic acid and dropping it without any further manipulation gives by far the best prospects for the patient in so far as adhesions and sloughing of the head of the cecum are concerned. These latter, I think, are often caused by the purse string and invagination, and that there is often an infection from leakage through perforation of the cecum caused by the purse string suture.

There are too many drains used following all abdominal operations, and most especially do I think that drainage leads to intestinal obstruction. However, where there is frank pus in the peritoneal cavity or where there is an idea that the colon bacillus has escaped into the peritoneal cavity, drainage is absolutely essential to the recovery of the patient. Whenever practical, a stab wound in the flank is the safest procedure for drainage. Appendicitis is a medical problem and when properly worked out must be done by collaboration of the laboratory man, the internist and the surgeon; otherwise, there will be danger that sometimes an operation will be undertaken too early and at another time too late. The one-sided point of view in such conditions on the part of either a surgeon too eager to operate or an internist who may believe that he can render aid with medicaments or by physical agents may be equally harmful. The internist and surgeon must work hand in hand on the border line case and apply all means of modern biology to find the most favorable moment for intervention if needed.

We assume that a large per cent of acute abdominal conditions are due to appendicitis. The laity is wise to this prevalent condition yet it still gives purgation. Physicians are too prone to give a hypodermic of morphine which masks the symptoms usually beyond the six hour time limit when the medical man should know the cause of acute abdominal pain. We should awaken to the fact that the United States has the largest death rate from this condition of any country in the world and that laxatives and delay are the prime factors in this death rate.

Erythroblastic Anemia.—Dr. J. A. Beck.

Erythroblastic anemia in children was discussed and compared with two others related forms of hemolytic anemia occurring in children, *i. e.*, the so-called sickle cell anemia, and congenital hemolytic icterus.

Clinical laboratory records and roentgen ray films were presented of a typical case of erythroblastic anemia occurring in an Italian girl who was observed from the age of four months to her death, March, 1932, having lived 5¼ years. During her life time she had 27 hospital admissions, and at least 35 blood transfusions. She suffered many intercurrent acute diseases. Splenectomy was performed at the age of 1 year and 9 months, with but transient benefit to her anemia. Normoblasts were always present in the blood smears, reaching 135,000 per cu. mm. of blood about two years after splenectomy. Early in her disease the hemoglobin was about 50 per cent, reaching 30 per cent or less before her death. The red cells numbered 4,000,000 to 1,500,000. The average of many total white cell counts was 33,000 per cu. mm., usually with a relative lymphocytosis. Abnormal leukocytes were never prevalent. The child's temperature was nearly always above normal. Transfusions improved the blood picture to some degree and brought on prompt, striking improvement in her clinical condition, but improvement lasted only a few days. A picture of the girl made a few weeks before death, shows the prominent abdomen, due at that time, in part, to ascites, and the Mongolian appearance of the face characteristic of the disease. Roentgenograms were shown of the skull and hand bones. These were made late in the course of her disease. The great thickness of the bones of the vault, with perpendicular striations, and the peculiar widening of marrow spaces in the long bones are a striking portrayal of the hypertrophied and finally exhausted hemopoietic marrow, roentgen ray findings not encountered except in the hemolytic anemias of children.

MISSISSIPPI BAPTIST HOSPITAL OF JACKSON, MISS.

The staff of the hospital met in the dining room of the hospital for dinner at 6:30 o'clock on June 7, with a large attendance. During the

meal, Miss Lackey made a very interesting talk to the staff and expressed her appreciation to the members for the kind trip which she was aided by them in taking.

The President, Dr. Garrison, called the meeting to order, after a short talk by the superintendent on his trip to St. Petersburg. The minutes were read and approved as read.

Dr. Van Dyke Hagaman then reported two cases:

Case 1. White female, was sent to the hospital about seven months pregnant. She was having pains and uterine contractions and in a short while was delivered of a seven months' dead fetus through the rectum. This patient then made an uneventful recovery with no incontinence of feces or any further trouble with the rectum.

Case 2. This case was of a white female whose history dates back three years when she suffered with nausea and vomiting, amenorrhea and the usual signs of pregnancy. This did not seem to materialize and the patient then took for granted after so long a time that she was not pregnant, though she did not menstruate any more till about six months previous to her admission when she started, accompanied by some pain and backache. She came to the hospital with a diagnosis of fibroid uterus. At the operation she was found to have a mass on the right side which was bound down to the ovary, tube, and uterus, and this was removed *en toto* and contained a dead fetus which was shown at this time.

Discussion by Dr. Harris was brief.

Drs. Ainsworth and Van Alstine presented the resectoscope. The history of the development of this instrument through Young, Calk, Davis, to the present instrument which uses a radio cautery circuit, which cuts as well as coagulates, was brought out. The present instrument was one which was designed by Dr. Carthy. The mortality in the series quoted has been very low and two cases on which the resectoscope was used were discussed. Both were doing unusually well. Dr. Shands led the discussion and believes that this does best on the cases which are the hardest to do surgically and seemingly ideal on the cases which are the hardest to do surgically and seemingly ideal on the cases in which there is retraction of the bladder neck. Dr. Van Alstine thinks that in the best hands that the ratio for the use of the instrument is about sixteen cases for its use against one on which it is not best to use the instrument.

Dr. Garrison presented a case report:

White male, aged 13 years, from the Baptist Orphanage, who came into the hospital with a hemorrhage from the lungs, temperature 104°F., rales and consolidation over right chest and with roentgen-ray findings indicating pneumonia. History revealed that he had swallowed a piece of grass commonly called cattail, crow's feet, or o'pos-

sum grass. The picture did not fit exactly a definite lobar pneumonia. The patient made an uneventful recovery and was sent back to the orphanage to return in three weeks with the same occurrence. He seems to be clear of all signs and findings of tuberculosis and is much improved now though the lung still shows some evidence of consolidation in a small area.

Dr. Harris discussed the case and mentioned one of another physician's who swallowed this piece of grass he thought but had insufflated it instead and in the course of time an abscess developed under the scapula on the left side and on opening the same this piece of grass was removed in one piece. The patient made an uneventful recovery.

Dr. Dobson also thought that this case was a foreign body in the bronchus.

A motion was offered and passed that the July meeting be held in the staff room of the hospital at seven o'clock with no dinner served and that the August meeting be dispensed with entirely.

Dr. Shands discussed a case of acute intestinal obstruction caused by an indirect hernia, and mentioned the fact that the mortality for the same is still what it was years ago.

Dr. Harris discussed a case of foreign body in the bronchus, cotton seed. Patient died of pneumonia as these vegetable foreign bodies usually cause pneumonia and death.

The Executive Committee consisting of Drs. Dobson, Harris, Shands and ex-officio, the President and Secretary, was elected. A program committee consisting of Drs. Hand and Wilson with the Secretary, were also elected at this time.

Dr. Harvey D. Garrison, Jr., was proposed for membership and referred to the membership committee which remains a secret committee appointed by the president.

The meeting was adjourned until July 4 at 7 o'clock.

Lawrence W. Long,
Secretary.

VICKSBURG SANITARIUM

Vicksburg, Mississippi

The regular monthly meeting of the staff of the Vicksburg Sanitarium was held on June 10, with ten members of the staff and two guests present.

After the transaction of the business of the staff and the reports from the records department and analysis of the work of the hospital, special case reports were made as follows:

1. Fracture of the Femur with Coincident Suppurative Cholecystitis and Abscess of Suprarenal Gland.—Dr. A. Street.

2. Coronary Thrombosis with Associated Diabetes.—Drs. L. J. Clark and L. S. Lippincott.

3. Tetanus with Recovery.—Dr. G. C. Jarratt.

Drs. D. P. Street and J. A. K. Birchett, Jr., reported on a recent visit to the Mayo Clinic.

Selected radiographic studies were shown as follows: Pulmonary tuberculosis; salivary calculi; pyloric obstruction; carcinoma of the stomach; injected fistula.

Three minute reports of the literature of the month were made as follows:

Dr. L. J. Clark—Classification and Differential Diagnosis of Anemias; Rheumatic Heart Disease in Children; Raynaud's Disease.

Dr. J. A. K. Birchett, Jr.—Chorionepithelioma.

Dr. G. M. Street—Uterine Curettage.

Dr. A. Street—Intestinal Obstruction.

Dr. L. S. Lippincott—Recent Developments in the Experimental Study of the Kidney.

The appointment of Dr. J. A. K. Birchett, Jr., as chief anesthetist of the sanitarium was announced.

The meeting closed with a lunch. The next meeting of the staff will be held at the hospital Monday, July 11.

Abstract: Tetanus with Recovery.—Dr. G. C. Jarratt.

Patient: Colored male, aged 7 years, admitted to hospital April 7, 1932.

Chief Complaint: "Spells," lock-jaw, pain in hip. Present Illness: Sister states that 10 days ago child stuck a stick in left foot at base of second toe; that she pulled it out from a depth of one inch; no bleeding. Wound closed when stick was removed; no medication. Three days later child began to complain of pain in left hip and limped about but was not in bed; no fever. No swelling of nodes or glands, no swelling around hip. Few days later began to have chronic contractures and at times would draw head back. All muscles would stiffen, especially abdominal and arms and child would cry out with pain in chest under sternum. Had six to eight of these seizures in 24 hours and in past 24 hours more frequent. Noted stiffness of jaw last night for first time and hasn't been able to open mouth since. No medicine or strychnine had been given. Past History: No contagion; no illness of consequence. No toxoid or vaccination. No rheumatism. Physical Examination: Well developed and nourished colored boy, conscious; every few minutes would scream and go into state of generalized convulsions or contractures with head thrown back and jaws tight with teeth grating. Could not open mouth enough to admit tongue depressor; no pain over mandible. Chvostek's sign negative. Marked stiffness of neck. Respiration 40 per minute; a to-and-fro murmur at base of heart, simulating a pericardial friction rub. Abdominal muscles board-like; impossible to palpate viscera. Phimosis. No pain in extremities; no limitation of motion or pain on motion; a lead pipe rigidity of all extremities. There was a healing stab wound of left foot at base of second toe, also an older wound at base of great toe in right foot.

Central nervous system showed knee jerks increased; no ankle clonus; stiffness of neck marked; trismus of jaws; Babinski and Brudzinski negative. Generalized rigidity of all muscles of body, including abdominal. Blood: Hemoglobin 82 per cent; erythrocytes 5,050,000; leukocytes 10,100; differential leukocyte count: small lymphocytes 21; large lymphocytes 3; small monocytes 3; polymorph neutrophils 73. No malaria found. Wassermann, Kline and Young, and Kahn tests negative. Spinal puncture gave clear fluid without increased pressure. Spinal fluid: cell count 35; differential count, small mononuclears 100; globulin not increased; colloidal gold reaction negative; Wassermann, Kline and Young, and Kahn tests negative. Course and Treatment: April 7, 1932; Gave 15,000 units tetanus antitoxin intraspinally; 5,000 units intravenously in 10 cc. of 5 per cent glucose; 10,000 units intramuscularly. April 8, 11 a. m.: Child more spastic with stiffness of neck and spasticity of abdominal muscles. Could raise from bed with hand at back of neck. Spinal puncture with clear fluid under no increased pressure. Gave 10,000 units tetanus antitoxin intraspinally. 7 p. m.: Gave 300 cc. of 5 per cent glucose intravenously and 10,000 units of tetanus antitoxin intramuscularly. April 9: Gave 400 cc. of 5 per cent glucose intravenously. Child in semicomatose condition and has attacks of chronic contractures of all muscles of body and cries out with pain. April 10: Gave 10,000 units of tetanus antitoxin intraspinally; also 10,000 units intramuscularly. April 11: Child responding somewhat but still has many seizures of clonic contractures of all muscles, less severe and less frequent than two or three days ago. Gave 10,000 units of tetanus antitoxin intramuscularly. April 12: There is still marked trismus; generalized rigidity of muscles with lead-pipe resistance; mild attacks of clonic contractures with pain; still in semicomatose condition. April 18: Trismus much less and eats; no clonic contractures; rigidity of all muscles less, especially of neck. Conscious and talks rationally. April 22: Child up in wheel chair; no rigidity of muscles; no stiffness of neck; no trismus; eating well. April 23: Discharged cured. Final diagnosis: Tetanus.

Summary: A child 7 years of age with active tetanus; onset three days after initial lesion; onset of trismus 18 hours prior to admission. Treated with tetanus antitoxin; 5,000 units intravenously, 40,000 units intramuscularly, and 35,000 units intraspinally a total of 80,000 units. The only other treatment was symptomatic with large doses of luminal frequently to control clonic convulsions.

CHARITY HOSPITAL MEDICAL STAFF MEETING.

On June 21, 1932, at 8:00 p. m., the regular monthly meeting of the Medical Staff of Charity

Hospital was held with Dr. Wallace Durel presiding.

Dr. N. Thiberge spoke briefly of two cases of allergy, one of asthma and the other of pruritus, in which he had used gynergen with very good results after adrenalin had failed to be of any aid. He suggested the possibility of this drug, which is a preparation of the active principle of ergot, being of further value in allergic conditions.

A new roentgen ray view box installed in the meeting room, and designed by himself, was demonstrated by Dr. Amedee Granger. The box is large enough for four plates, contains four 250-watt lamps and a blue filter behind the glass. It produces an evenly diffused light and permits of demonstration of roentgenograms without the other lights in the room being turned off. A series of interesting plates were then shown and discussed by Dr. Granger, clearly demonstrating the advantages of the new installation.

The first radiogram was that of a foreign body in the left lung. The entire left lung was opaque and the mediastinal structures had been shifted. Following the reading of this plate a bronchoscopic examination had been done and a plug of mucus removed from the left bronchus. A few days later a second roentgenogram showed the lung fields absolutely clear.

The next plate shown had been made on a patient with the provisional diagnosis of empyema. Roentgen ray diagnosis was embolism of the lung. The costo-phrenic and cardio-phrenic angles were normal; there were two abnormal densities in the paranechyma and the right diaphragm was elevated.

In another case with a tentative diagnosis of infantile or hilar tuberculosis in a young adult, the roentgenogram showed marked hilar lung reaction. Following rest in bed for 10 days a second roentgenogram showed the lung fields absolutely clear, thus making a diagnosis of a low grade grippal pneumonia. In contrast to this presentation a radiogram of a case of typical hilar tuberculosis in a young adult was shown. This plate showed peribronchial and pre-hilar infiltration, vesicular involvement and Dunham's fan.

Three roentgenograms of three different cases were shown demonstrating the difficulty of making a clinical diagnosis of tuberculosis. The first case had a history of slight expectoration of rusty sputum and a brassy cough. The sputum had been negative for acid fast bacilli. The plate of the case showed irregular proliferation from the mediastinum on both sides with wooly margins, and a diagnosis of hilar malignancy had been made. The second case shown was similar to the first except the pathology shown in the radio-

gram was not so extensive.

The third roentgenogram presented similar findings except for the additional evidence of consolidation of the right upper lobe, either an exudative or a proliferative lesion. All three of these cases of pulmonary malignancy had clinical evidence of intrathoracic distress.

An unusual roentgenogram of a large aneurism of the left ventricle was then shown. Dr. Hull presented the clinical aspects of this case, which had been under his observation, and discussed ventricular aneurisms. He stated that such aneurisms are almost due to previous myocardial infarction.

Another view of a large dissecting aneurism involving the arch and descending aorta, was said by Dr. Granger to be the largest he had ever seen.

Views of a case of extensive gastric malignancy with retro-peritoneal involvement, a case of congenital lues with widespread bone involvement, and two cases of congenital absence of the pubic bone completed the interesting and instructive demonstration of Dr. Granger.

Dr. John Musser then presented three protracted cases of thyroid dysfunction, and discussed their clinical courses. The first case shown was a 20-year-old white female with a palpable goiter, tachycardia, tremor and nervousness. Her basal metabolic rate was plus 60 and there was an elevation of the blood pressure. This patient had formerly been treated for tuberculosis and was now considered well. The point of discussion was the difficulty in the differentiation of tuberculosis and hyperthyroidism.

The next case, a white female, aged 41 years, had a small nodular goiter, but in contrast to the first patient shown was calm, placid, and peaceful. She had, however, lost 40 pounds in the previous two months and there was a definite tachycardia. Her basal metabolic rate was plus 69.

In contrast to the first two cases, the third case shown was one of typical hypothyroidism with a basal metabolic rate of minus 29. This individual had a typical red tongue and pellagrous lesions on the hands and feet. As the pellagra improved under therapy the thyroid symptoms had also improved.

The first case was discussed by Dr. Wallace Durel who had been the patient when she had active pulmonary tuberculosis, minimal B. No

acid fast bacilli had been found in her sputum. There were no thyroid symptoms at that time. The injection of one millionth of a milligram of tuberculin had caused her to have an elevation of temperature to 101° F. at that time. In addition the characteristic blood findings were noted. After treatment the injection of 10 milligrams of tuberculin produced no reaction and the patient had been discharged as apparently cured. Dr. Durel suggested the use of tuberculin in the differentiation between hyperthyroidism and tuberculosis.

Dr. Giles questioned a basal metabolic rate as high as plus 69 in an individual as well nourished as the one shown. He stated that in 5,000 cases he had never seen a rate so high in such a well nourished individual. In replying to Dr. Giles, Dr. Musser stated that he had expected an even higher rate in that individual.

Dr. Julian Barton presented a white male, aged 30 years, who had a history of fever, weakness and indisposition for one year. In addition he had pain in the right shoulder radiating up to the neck. Physical examination showed a coated tongue, epigastric tenderness and diminished excursion of the right diaphragm. There was no evidence of enlarged liver clinically. A tentative diagnosis of liver abscess had been made which had been definitely substantiated by the roentgenogram. Dr. Granger showed the roentgenogram of this case with the further explanation that an elevated diaphragm does not always mean liver pathology. In some instances such an abnormality may be due to phrenic nerve injury. The differentiation of the two conditions lies in the fact that in liver abscess there is a bulging of some portion of the diaphragm, while in phrenic nerve injury the entire diaphragm is elevated.

The Secretary read several diagnoses of cases in which the autopsy findings had not agreed with the clinical interpretation of the case.

On a motion by Dr. Oscar Bethea the bi-monthly luncheons were discontinued for the next year, to be replaced by the regular scientific sessions.

There being no further business the meeting adjourned for the summer vacation.

This report was prepared from the notes of the meeting kindly taken by Dr. Maurice Sullivan.

Willard R. Wirth, M. D.

TRANSACTIONS OF ORLEANS PARISH MEDICAL SOCIETY

During the month of June besides the regular meeting of the Board of Directors, the Society held one regular scientific meeting, and one joint clinical meeting with the Charity Hospital Staff.

At the scientific meeting held June 13 papers were read and discussed as follows:

Some Observations on the Inaugural Symptoms of Hypertension. By Dr. Sidney M. Copland.

Discussed by Drs. Randolph Lyons, Allan Eustis, I. L. Robbins, J. H. Musser, I. I. Lemann and closed by Dr. Copland.

Modern Conceptions of Diagnosis of Oral Pathology. By Dr. Sidney L. Tiblier.

Discussed by Drs. Homer Dupuy, J. P. Wahl, F. M. Johns, W. A. Lurie, Randolph Lyons, Man-nie Mallowitz, L. C. Chamberlain and closed by Dr. Tiblier.

Radiation Therapy of Toxic Goiter. By Dr. Leon J. Menville.

Discussed by Drs. Lucien A. Fortier, H. R. Mahorner, Frank Loria, M. T. Van Studdiford and closed by Dr. Menville.

At the joint clinical meeting held June 27 in the Miles Amphitheatre, Charity Hospital, interesting cases were presented and discussed.

It was with deep regret that we learned of the death of Dr. Lanford's mother. Our sincerest sympathy is extended to him and his family.

Miss Marshall, our Assistant Librarian, has gone to San Francisco to attend the annual meet-ing of the Medical Library Association.

On July 11 the Society will hold its last meet-ing this season, when it will adjourn for summer recess during July, August and September. The first meeting in the Fall will be held October 10.

We have received a communication from the New Orleans Ice Manufacturers Exchange in which they state that the poor will be given ice free upon prescription from members of our Society. The membership is requested to co-operate in this worthy cause.

TREASURER'S REPORT.

Actual book balance 4/30/32.....	\$1,406.40
May receipts	1,770.27
	<hr/>
	\$3,176.67
Expenditures	\$1,043.12
	<hr/>
Actual book balance 5/31/32.....	\$2,133.55

LIBRARIAN'S REPORT.

The days of the A. M. A. brought a constant stream of visitors through the Library and kept the staff busy doing hostess duty. Through some of the acquaintances thus formed we are already receiving gifts of material to complete files, which we had been unable to find hitherto.

Thirty-two books have been added to the Library. Of these six were received from the New Orleans Medical and Surgical Journal, two by purchase, nine by binding and fifteen by gift. A list of new titles of recent date is given below.

The constant reference use of the Library has continued. The list below includes most of the subjects upon which we have been called to fur-nish material during May.

Colitis in children; History of orthopedics; Cal-cification of pericardium; Cancer of lungs and bronchi; Leukoplakia; Irritable colon; Cancer of sinuses; Acute vesiculitis; History of So. medicine; Date of death of Dr. Warren Stone; Portraits of early N. O. educators; Was either Rhases or Avi-cenna physician of Harun al Raschid; Nutrition in edema; Osteomyelitis; Referred pain; Creati-nine in diuresis; Pick's solution for tissue preser-vation; Gangrene in Burger's dis.; Resorption in renal tubules; Epidural injection in sciatic rheu-matism; Agranulocytosis; Elephantiasis of vulva; Avertin; Sympathectomy; Ganglionectomy; Am-monia in urea; Grehant's anesthetic; Diabetes mellitus.

NEW BOOKS.

Nat'l Board of Medical Examiners—Questions for examination. 1931.

Amer. Neurological Assn. Transactions. 1931.

Internat'l Post-Graduate Assn. Transactions. 1931.

Castiglioni—Italian Medicine. 1932.

Wolman—Significance of Water-borne Typhoid Fever Outbreaks. 1931.

Bonnier — Centrotherapie et Asuerotherapie. 1932.

Vannier—La doctrine de l'homeopathie Fran- caise. 1931.

H. Theodore Simon, M. D.,
Secretary.

LOUISIANA STATE MEDICAL SOCIETY NEWS

H. Theodore Simon, M. D., Associate Editor

THE GENERAL MEETING OF THE LOUISIANA STATE MEDICAL SOCIETY.

An open meeting of the Louisiana State Medical Society was held on Monday, May 9, 1932, in the Hutchinson Auditorium.

The meeting was called to order by Dr. Shirley C. Lyons, Chairman of the Committee on Arrangements, who introduced Dr. John A. Lanford, President of the Orleans Parish Medical Society, who welcomed the delegates of the Louisiana State Medical Society, members of the organization, and their guests on behalf of the Parish Society. Dr. S. C. Barrow then delivered his Presidential Address to the State Society, which was published in the last month's number of the New Orleans Medical and Surgical Journal.

The Chairman then introduced Dr. W. G. Owen to open the exercises of the presentation of emblems to the living Past Presidents. Dr. Owen spoke as follows:

"At the last meeting of the La. State Medical Society the following resolutions were unanimously adopted:

"Whereas the American Medical Association has conferred an Emblem upon its living Past-Presidents as a slight testimonial of their endeavors in its behalf; and

"Whereas we earnestly believe our living Past-Presidents are entitled to the same recognition for their services; therefore, be it

"Resolved, That the La. State Medical Society present a similar emblem to each of its living Past-Presidents as a mark of appreciation for their services and as a token of esteem from their fellow members; and be it further

"Resolved, That a committee of two be appointed to order said emblems and arrange for their presentation at the open meeting in 1932.

"Be it further resolved, That this presentation be established as an annual custom and that at all succeeding meetings the retiring president receive the official emblem."

"The committee has designed an emblem which is symbolical of the Society, the State, and the Profession. We would say to you gentlemen who will receive this emblem, that it is not only significant of the high regard of your associates, but it is also a tribute to your executive ability, as has been demonstrated by the material progress and advancement of the Society during your respective administrations.

"It is customary to confer the rewards for distinguished service through the hands of the gentler sex. In conformity with this tradition, we requested two representatives of our Ladies' Auxiliary to invest you with your insignia of Past-President, which they graciously consented to do,

and which should make you doubly appreciate the honor."

Following this brief introductory explanation by Dr. Owen he and Dr. E. O. Trahan alternated in reading the citations of each living Past President. The emblems were most graciously pinned on by Mrs. S. M. Blackshear and Mrs. S. C. Jamison, officers of the Woman's Auxiliary of the Orleans Parish Medical Society.

Rudolph Matas: Was born in St. John Parish, La., 1860; twenty years later graduated as doctor of medicine from The Tulane University of Louisiana, after serving as undergraduate interne at Charity Hospital. The degrees of LL.D. and Sc.D. have been conferred on him by several universities; he is a member of innumerable medical and scientific bodies in the United States and foreign countries. His professional career began as Demonstrator of Anatomy at Tulane Medical, then professor of Surgery until he was retired as Emeritus. He has been an active surgeon at all the principal hospitals of New Orleans besides meeting the demands of an enormous private practice. His triumphs in original surgical conceptions, his wonderful operative skill are historic, and are too well known to bear repetition, but these feats were always tempered by conservatism, the welfare of the patient being the Pole Star of his treatment. Dr. Matas was President of the Society in 1894, and glories in the fact, that the untiring efforts of himself and his confreres resulted in the enactment by the State Legislature of a law "Regulating the Practice of Medicine" and creating "The State Board of Medical Examiners." This law has been functioning up to date, redounding to the welfare of both the public and the profession. Knowing that nearly all the doctors here tonight have been his former pupils, one is justified in saying that each gratefully remembers his uniform attitude of encouragement and friendliness to the Medical Student; this same altruism has been extended to the young practitioner, who never appealed to him in times of stress for advice or counsel but that it was freely and gladly given. His popularity with the Profession is unbounded and to a man they unite in wishing him in the words of the Bard of Avon, "Honor—love—obedience—troops of friends,—And all that merit ought to have."

Whyte Glendower Owen: Graduated from Centenary College of Louisiana as A.B. and B.S., served as undergraduate Interne in New Orleans Charity Hospital, and received his M.D. from Tulane University; President of the La. State Medical Society in 1900, and later one of its rep-

representatives in the House of Delegates of the A. M. A.; a member and Vice President of the Louisiana State Board of Health, and also Surgeon General of the State National Guard. In 1926 honored by his alma mater with the degree of LL.D. When Congress created the M. R. C. thereby transforming civilian doctors into lieutenants of the U. S. Army, the War Department sent three commissions to Louisiana—one to the Dean of Tulane Medical School, one to the ex-President of the State Board of Health, and one to the Surgeon General of the State National Guard. Dr. Owen accepted his commission as a compliment to the State National Guard, and forgot about it, but nearly ten years after, when our country entered the World War he was surprised to receive another commission as Major in the Medical Corps, with orders to wind up his business and report to Camp Beauregard as Commanding Officer of the Tuberculosis Examining Board. This board examined more than 45,000 young soldiers, over one per cent of whom were found affected with tuberculosis, discharged and sent home. Upon completion of this duty Major Owen was promoted and placed on inactive list.

Charles Louis Chassagnac: Born and educated in New Orleans; served as undergraduate Internes in Charity Hospital, and received degree of M.D. from Tulane University of La.; appointed on visiting staff of the Charity Hospital in 1883, a member thereof up to date; latterly in an honorary capacity; a member of the first faculty of the New Orleans Training School for Nurses, the pioneer in the South, and President for many years of the New Orleans Sanitarium, founded by Physicians as a non-sectarian hospital, and to foster the Training School; President of the New Orleans Polyclinic, later on Dean of the Tulane Postgraduate School, being also professor of his specialty in the same institution; editor of the New Orleans Medical and Surgical Journal for a number of years. Always active in Medical organization, he served as President of the State Society in 1905. He was secretary of the Orleans Parish Medical Society for three consecutive terms and then President for same period of time. He was Superintendent of the Eye, Ear, Nose and Throat Hospital for eight years during which interval he discontinued the active practice of medicine which he resumed in the beginning of 1931.

Henry Dickson Bruns: Descendant of a distinguished ancestry whose members have written their names on the pages of American Medical History; educated at the University of Virginia; served as an undergraduate Internes in the New Orleans Charity Hospital; graduated from Jefferson Medical College in 1881; one of the Founders of the New Orleans Sanitarium and Training School for Nurses; also of the N. O. Polyclinic, in

which he was Professor of diseases of the eye; visiting Surgeon of Charity Hospital, and later Chief Surgeon of the Eye, Ear, Nose and Throat Hospital, which position he held until 1930. Dr. Bruns is the author of numerous articles both on his specialty and political subjects. A member of the Orleans Parish M. A. and La. State Medical Society, of which he was President in 1907. He married Miss Kate Logan, daughter of General Logan of Virginia, and has four sons.

Edward Denegre Martin: A native of St. Landry Parish; began the study of medicine in 1887; in 1889 stood a competitive examination to become a successful applicant for the position of Internes in the Charity Hospital; he served two years; graduated at Tulane University of La.; immediately appointed House Surgeon for the New Orleans Sanitarium where he remained until 1894. He became associated with the New Orleans Post Graduate School as professor of Minor and Clinical Surgery, when this school became a post graduate department of Tulane School, he was appointed to the chair of general surgery, and has filled the position up to the present time, and also acted as Dean for 4 years. He was elected a member of the Stars and Bars Fraternity, and is a member of the American College of Surgery, of the A. M. A., of the Southern Surgical Association and Orleans Parish Medical Society. He is on the staff of the Charity Hospital, Touro Infirmary, the Eye and Nose Hospital, and has contributed a number of articles on Surgery to different medical journals. He was president of the Louisiana State Medical Society in 1909, and always taken an active interest in its affairs.

Richard Oliver Simmons: President of La. State Medical Society 1911-12; born in Simmonsville, Miss.; received his academic education at the University of Miss.; attended the Louisville Medical College and received degree of M. D. in 1892; located at Alexandria, Louisiana, the same year, doing general practice; helped found the Alexandria Sanitarium in 1903; first to do major surgery in central Louisiana, removing first appendix in 1896; helped organize Rapides Parish Medical Society in 1892, an active member since then, serving all offices at various times; did post-graduate work at New York Polyclinic and has attended numerous clinics for post-graduate work; served as health officer of Rapides Parish for 14 years; elected Fellow of American College of Surgeons in 1919; chairman of Medical Advisory Board of 7th Dist. during World War; has contributed numerous papers to Medical Journals.

Fred J. Mayer: Born in Louisiana in 1859; moved to Europe living in Munich, Bavaria, London and Belfast; returned to Opelousas in 1871; education from private tutors, M. E. College,

Belfast, public school, Opelousas; graduated from Tulane University Medical Department in 1883; assistant Quarantine Officer Louisiana, 1894-98; lecturer (under auspices of La. State Agriculture Dept., 1899-1900); special Medical Inspector Irion Board of Health, 1906-09; Mississippi State Board of Health, 1909; special Medical Inspector Texas Board of Health, 1911; President Attakapas Medical Association, 1885; in 1878 drafted a scheme of public education in the cause and prevention of contagious diseases in man and cattle; in 1897 organized State Sanitary Association and held first Institute of Public Hygiene; President La. State Medical Society, 1912.

George S. Bel: Graduated as doctor of medicine from Tulane University Medical School, 1893; President in 1914, at 42 years of age, rendering conspicuous services to the State Society, characterized by organization work in the various Parish and District Societies stretching from Caddo to Plaquemines Parishes. Such services were rendered with a great deal of sacrifice and expenditure of personal funds. Subsequent to his presidency, he was placed on the Council, and for a number of years as Chairman of the Council directed the policies of same. Specialty, internal medicine; Professor of Clinical Medicine, Tulane Medical School (graduate), 1912-1924; Professor and head of the Department of Internal Medicine, in the same institution, (under-graduate) 1912-1926; Professor of the Department of Medicine, Louisiana State University Medical Center, 1932.

C. J. Willis: Born in Claiborne Parish, 1865; education received at Arizona Academy and the Homer High School; graduated in medicine at Vanderbilt University in 1887; returned to native state and practiced medicine at Homer for fifteen years; located at Shreveport in 1904 and became associated with the late Drs. T. E. Schumpert and Louis Abramson, who were conducting at that time the Shreveport Sanitarium. This was taken over by the Sisters of the Incarnate Word and after Dr. Schumpert's death in 1908, the now T. E. Schumpert Memorial was constructed; became connected with this institution in the capacity of Chief of the Surgical Staff and remained in that capacity for 20 years. He was commissioned by President Taft a first lieutenant in the Medical Reserve Corps in 1911, ordered to Brownsville, Texas, when hostilities seemed imminent between the U. S. and Mexico in the summer of 1916 and was made senior civilian surgeon of the Brownsville U. S. Hospital where he served until the threatened hostilities ceased. Chief of Staff and president of the hospital board of directors of the Willis-Knighton Clinic; Fellow of the American College of Surgeons; a member of the American Medical Association; elected Presi-

dent of the Louisiana State Medical Society in 1915.

William H. Seemann: Served as Interne in New Orleans Charity Hospital and graduated at Tulane University in 1900; Professor of Bacteriology and Preventive Medicine in the Tulane Graduate Medical School of Medicine since 1908; Professor of Hygiene in the Tulane Medical School since 1914; Bacteriologist for the La. State Board of Health; President of the State Medical Society in 1916; Delegate of La. State Medical Society to House of Delegates A. M. A. Was Chairman of Committee of Arrangements for the 1932 meeting of the American Medical Association, and his supervision made the operation of all the different functions of the meeting so successful.

(To be continued.)

SECOND DISTRICT MEDICAL SOCIETY

A District Medical Society was organized by doctors of the Second Congressional District, exclusive of Orleans Parish, at a meeting in Hahnville, Sunday, June 5, called by the Councilor of the District, Dr. Daniel N. Silverman of New Orleans. Dr. J. S. Kopfler of Kenner was elected President of the organization, with Dr. L. T. Donaldson of Hahnville, Vice-President, and Dr. L. O. Waguespack of Vacherie, Secretary-Treasurer. The Parishes included in the District are St. Charles, St. James, St. John and Jefferson.

Dr. Leon J. Menville, Past President of the Louisiana State Medical Society, and President of the Louisiana State Board of Medical Examiners, and Dr. P. T. Talbot, Secretary-Treasurer of the Louisiana State Medical Society, assisted the Councilor in this organization, and made addresses relative to medical matters of importance to the organization. Another meeting will be held soon at Reserve.

FIFTH DISTRICT MEDICAL SOCIETY

The Fifth District Medical Society of Louisiana held its regular meeting in Monroe, Louisiana, Tuesday, June 14, at 5:30 p. m. at the St. Frances Sanitarium. The scientific program was as follows: Dr. J. B. Vaughan of Monroe talked on "Present Economical Situation as it Affects the Medical Profession" during the banquet. This was followed by four most interesting reports: "Differential Diagnosis of Early Pulmonary Tuberculosis," by Dr. M. W. Hunter, Monroe; "Some Aspects of Chest Surgery," by Dr. Jos. E. Heard and Dr. Chas. R. Gowen, Shreveport; "Demonstration and Value of Friedman's Test for Early Pregnancy," by Dr. John Pracher, Pathologist of St. Frances Sanitarium, Monroe; "An Interesting Case," by Drs. J. W. Cummin, B. M. McKoin, and F. P. Rizzo, Monroe. In addition, several

matters of vital importance came up for discussion. The entertainment, music, and dancing was enjoyed by the members present.

D. S. Calhoun, M. D., President.

F. P. Rizzo, M. D., Secretary-Treasurer.

SIXTH DISTRICT MEDICAL SOCIETY

To the Members:

My dear Doctors:

I had mapped out and arranged for a splendid program for the Spring meeting of the Sixth District Medical Society, when several members called my attention to the fact that the State Medical Society and several other of the larger medical societies from this section of the country had called off their scientific program entirely, due to the protracted meeting the A. M. A. would hold in New Orleans, the first part of May, and suggested we do the same. Believing that the ruling body of the Sixth District Society was made up of the Vice-Presidents I wrote to each one of these, requesting they write me their views. Ninety-nine per cent answered promptly requesting that we call off the scientific program and hold only an official meeting for election of officers, giving as their reason the depression, the cost that most of us would go to in attendance upon the A. M. A. meet, and that the lengthy A. M. A. meet should be enough to "hold us" for a while. I complied with their request.

Now comes forth an urgent demand that a memorial meeting be called, at once, in honor of our deceased late President, Dr. "Bob" Jones, at which time the election of officers will take place. This meets my hearty approval and endorsement.

This meeting shall take place in Baton Rouge July 14, 1932, beginning at 10 a. m. We propose that this shall be a meeting and banquet that will be well worth while and we beg all of you physicians of the Sixth District to do honor to the late Dr. Jones by your presence. We can assure you that the meeting will be a distinguished one.

F. F. Young, M. D.,

President, Sixth District Medical Society.

EAST AND WEST FELICIANA BI-PARISH

The Bi-Parish Medical Society met in the East Louisiana State Hospital. Dr. C. S. Miller read a very valuable and scientific paper on "Psycho-neurosis, with Special Reference to Hysteria and Neurostheua."

Paper discussed by members present.

Our next meeting will be with The Superintendent and Staff of the East Louisiana State Hospital the first Wednesday in August, at 7:30 p. m.

S. L. Shaw, President.

E. M. Robards, Secretary.

THE MEDICAL SCHOOL OF THE UNIVERSITY OF TEXAS

On May 30 and 31, 1932, the Medical School of the University of Texas at Galveston, celebrated the dedication of three new buildings erected on the campus with impressive ceremonies and a series of delightful social functions.

The three new buildings, of a thoroughly modern and handsome architectural type, are dedicated to laboratory instruction, to an out-patient clinic and a home for nurses.

The dedication was held conjointly with the 41st annual Commencement Exercises of the Medical School. The buildings have been built and equipped at a cost of \$3,000,000.00, provided almost exclusively through the munificence of the late John Sealy and his daughter, Mrs. R. Waverly Smith, the generous founders of the Sealy Hospital and of the present Sealy-Smith foundation created for the benefit of the School and University Hospital.

Monday was devoted exclusively to a Scientific program conducted under the Presidency of Dr. A. O. Singleton, Professor of Surgery. The guests and public were welcomed by the Dean, Dr. George S. Bethel, and lectures, illustrated by moving pictures and lantern slides, were given by Dr. O. H. Plant, University of Iowa, on "The Cardiac Effect of Some Commonly Used Drugs;" Dr. E. H. Carey (Dallas), President American Medical Association, on "Glaucoma;" Dr. Dean Lewis, Johns Hopkins University, a lantern lecture on "Nerve Injuries;" Dr. Rudolph Matas, Tulane University of Louisiana, on "Personal Experiences in the Surgery of the Subclavian Arteries;" Dr. Matas also paid a tribute to the late Professor Thompson, the Nestor of Texas Surgery, and speaking for Tulane, emphasized the cordial relations that have always existed between Tulane and the Medical School at Galveston.

In the afternoon very instructive clinics were held by Dr. Graves, University of Texas; Dr. J. J. Foster, President Elect Texas State Medical Association, and by Dr. Lewellys F. Barker, Johns Hopkins University.

The dedication exercises, held the next day, were presided over by Dr. Edward Ransdall, Chairman Board of Regents, University of Texas, followed by a series of notable addresses by R. L. Batts, LL.D., Chairman of the Board of Trustees; M. H. Royston, Trustee of the Sealy-Smith Foundation; Dr. H. Yandell Benedict, President of the University, and Dean G. E. Bethel conferred the M. D. degree on 71 graduates of the Medical School and 18 graduates of the Nursing School, and by Dr. J. O. McReynolds, President State Medical Association of Texas; Dr. Louis B. Wilson, Director of the Mayo Foundation. Dr. Lewellys Barker delivered the Commencement Address.

Among the valuable gifts given to the school this year is the unique collection of 300 cataract lenses removed in the capsule from human eyes and from the lower animals, together with numerous microscopic slides illustrating the embryology and comparative anatomy of the lens presented by Dr. J. O. McReynolds, the distinguished ophthalmologist of Dallas.

Despite the comparative isolation of Galveston from the great Metropolitan centers of population, the high character and distinguished ability of its teaching personnel, combined with its unlimited resources for expansion, will increasingly attract an abundance of clinical material and will maintain for this Institution the reputation for efficiency and progressiveness which it so deservedly enjoys in the medical world.

A special meeting of the Houston Medical Society was held on May 31, in honor of Dr. Matas, Emeritus Professor of Surgery, Tulane, on his return from Galveston where he had delivered an address at the dedication of the three new buildings of the Medical School of the University of Texas.

The meeting of the Houston Society was preceded by a reunion of the Tulane Alumni who had assembled at the home of Dr. Charles C. Green (Tulane, 1910), chief surgeon of the Southern Pacific Railroad system in Texas, who entertained Dr. Matas and the many alumni who had come to greet their old and honored chief. After dinner the Alumni adjourned in a body to meet at the Houston Medical Society where Dr. Matas gave an illustrated lecture on the Surgery of the Subclavian Arteries and entertained the audience with a reminiscent talk on life in the Rio Grande border where he had resided in the early days of his boyhood. There was a large attendance and enthusiasm prevailed.

RESOLUTIONS ON THE DEATH OF DR. GUTHRIE.

WHEREAS: Almighty God in his wisdom has taken from our midst James Birney Guthrie, the associate of some of us for many years and the cherished teacher of others of us; and

WHEREAS: In the death of our friend and fellow physician we of the Medical Division of the Staff of the Charity Hospital have suffered a great loss; and

WHEREAS: James Birney Guthrie, a man of personal distinction and charm, a sincere student of medicine, a clinician of renown, and a forceful and valued teacher of medicine will no longer participate in our meetings and in our daily hospital life:

BE IT RESOLVED, THEREFORE: That we, the medical staff, desire to record our sorrow in the passing of our co-worker by placing a copy of these resolutions in the hands of the family of Dr. Guthrie, in the minutes of this staff and in the New Orleans Medical and Surgical Journal.

The Third District Medical Society passed the following resolution:

WHEREAS: It has pleased God in all His infinite wisdom to remove from our midst Dr. Birney Guthrie, and

WHEREAS: Dr. Guthrie during the past thirty-one years of his distinguished career has been an outstanding example to the Medical Profession through his years of service in his many activities to his State, numerous institutions and medical bodies, to which service he devoted the prime of his life and his genius for public service in its highest manifestations, and,

WHEREAS: To the Medical Profession as a whole, and to many of its organizations and public bodies, he brought his enthusiasm and ability, always instilling the high ideals of his personality which has brought him honor and fame, not only from his co-workers, but throughout these United States; therefore be it

RESOLVED: That this Louisiana Third District Medical Society spread upon the minutes of its records its appreciation of Dr. Guthrie's eminent qualifications and character, and, be it further

RESOLVED: That in his death this Society has lost one of its most distinguished members who for all time will stand as an example and ideal for its members, and, be it further

RESOLVED: That a copy of these resolutions be forwarded to his family, to whom its deepest sympathy is extended, and that these resolutions be spread upon the minutes of the Society, and that they be published in the New Orleans Medical and Surgical Journal.

A. R. Trahan, M. D., Chairman.
L. B. Long, M. D., Secretary.

NEWS ITEMS

Dr. P. T. Talbot attended the regular monthly meeting of the Fifth District Medical Society in Monroe, Tuesday, June 14.

Dr. Charles A. Bahn was elected president of the Louisiana Society for the Prevention of Blindness at the annual meeting of the organization at Touro Infirmary.

Other officers elected were: Nicholas Bauer, first vice-president; William A. Shuler, second vice-president; Miss Florence Loeber, third vice-president; Rabbi David Fichman, treasurer, and

Mrs. Mary Cross King, executive secretary. Members of the Board of Directors elected were Harry L. Hammett, J. K. Byrne, Dr. W. T. Browne, Dr. W. R. Buffington, Mrs. Joseph Haspel, Dr. Henry N. Blum, and Mrs. A. P. Perrin. Those elected honor members were Dr. Henry Dickson Bruns, Dr. Rudolph Matas and Dr. J. W. Newman.

On June 16, 1932, Prof. O. W. Bethea, of the faculty of the Graduate School of Medicine of The Tulane University of Louisiana, addressed the meeting of the Seventh District Medical Society held at Lake Charles, La., on "Angina Pectoris."

Dr. C. Jeff Miller of New Orleans was elected to the Council of the American Gynecological Society, at the closing session of the society's national convention held in Quebec, Canada.

The National Broadcasting Company announces that beginning June 20 at 10:00 p. m., New York time, Phillips H. Lord, famous as the Seth Parker of this Company, in talks broadcasted each Monday, Tuesday and Wednesday, will pay tribute to medical men of all classes in his newest characterization, "The Country Doctor."

The Rapides Parish Medical Society held a special meeting the night of May 30, in re: physicians' occupational tax, and appointed a special committee composed of the following to help the Legislative Committee of the State Society at Baton Rouge:

Dr. J. A. White, Dr. J. A. Packer, and Dr. J. H. Landrum.

TULANE ALUMNI DINNER

Fully 125 members of the Alumni were present at the Tulane Alumni dinner that was held at the Tip Top Inn of the Roosevelt Hotel, Wednesday, May 11, and practically every Southern state was represented. Dr. Matas gave a very splendid talk regarding the history and work of the various Deans of the Tulane Medical School during the past many years, illustrating his talk with lantern slide photographs of them. It was my good fortune to be toastmaster, also my good fortune to introduce quite a number of the old Alumni who during the years have attained positions of marked distinction in the medical world.

W. A. Reed, M. D.

HEALTH OF NEW ORLEANS

The Department of Commerce, Division of Vital Statistics, reports the following concerning the mortality rate in the City of New Orleans. During the week ending May 14, there were reported in the City of New Orleans 131 deaths,

79 among the white and 52 in the colored race. The death rate for both races was 14.4, that of the white 12.1 and of the negro 19.8. The infant mortality rate was 51. For the week ending May 21, the death rate had fallen to 12.1 as a result of 110 deaths, 65 among the white and 45 in the colored race, the death rate of the former of 10.1 and of the latter 17.1. The infant mortality this week was 57. For the week ending May 28, there were 134 deaths, distributed 80 white and 54 colored, giving a rate of 14.8 for the whole City, and 12.4 for the white population. The infant mortality had increased to 80 as a result of the deaths of 14 infants under one year of age. The following week there were 124 deaths, 79 white and 45 colored, giving a death rate of 13.7 for the total population, 12.3 for the white and 17.1 for the negro. The infant mortality rate was 74.

INFECTIOUS DISEASES IN LOUISIANA

Dr. J. A. O'Hara, State Board of Health of Louisiana, in collaboration with the Treasury Department of the United States Public Health Service, has issued the following morbidity weekly reports, the important features of which are here abstracted. For the week ending May 28, there were 102 cases of syphilis reported, 45 of gonorrhea, 41 of pulmonary tuberculosis, 35 of diphtheria, 25 of whooping cough, 30 of pneumonia, 20 of typhoid fever, and 12 of malaria. Six of the 20 cases of typhoid fever were reported from Evangeline Parish. Twenty-six cases of diphtheria are reported from Orleans Parish. For the week ending June 4, there were reported 47 cases of pulmonary tuberculosis, 26 of syphilis, 22 of malaria, 20 of diphtheria, 18 of whooping cough. Twelve cases of hookworm infestation were reported this week, as were also one case of smallpox and 2 cases of undulant fever and one instance of tularemia. For the twenty-third week of the year ending June 11, the reportable diseases had dropped considerably. During this week there were reported 23 cases of diphtheria, 21 of typhoid fever, 18 of syphilis, 16 of pneumonia, and 16 of pulmonary tuberculosis. Of the 21 cases of typhoid fever reported 4 came from the Parish of Franklin and 3 from Rapides, while 2 each were reported from Assumption, Calcasieu, DeSoto, Orleans and Tensas. Four cases of smallpox were reported and one case of leprosy.

AMERICAN BOARD FOR OPHTHALMIC EXAMINATIONS

The American Board for Ophthalmic Examinations will hold an examination in Montreal on Monday, September 19, 1932, at the time of the

meeting of the American Academy of Ophthalmology and Oto-laryngology.

Necessary applications for this examination can be procured from the Secretary, Dr. William H. Wilder, 122 South Michigan Avenue, and should be sent to him at least sixty days before the date of the examination.

GRADUATE COURSES IN NEUROLOGY AND PSYCHIATRY

The Extension Division and School of Medicine of Columbia University, cooperating with

the Neurological Institute of New York and the New York State Psychiatric Institute and Hospital announces a series of graduate courses in neurology and psychiatry. The courses will start October 3, 1932, and end December 10. One course will be devoted principally to psychiatry and the other to neurology. Beginning January 23, 1933, and ending May 13, 1933, an intensive course will be given in neuropathology. The details of these courses are on file in the office of the New Orleans Medical and Surgical Journal to those who may be interested.

OBSTETRICAL EDUCATION: THE WHITE HOUSE CONFERENCE ON CHILD HEALTH AND PROTECTION—The White House Conference on Child Health and Protection was called by President Hoover to consider the status of medical practice in this country as regards the care given to maternity patients and to children and the results obtained by such care. The various questions involved were considered from all possible angles by appropriate committees, and the findings were presented and discussed at the meetings of the conference and of its various subdivisions. These studies are being compiled, and are published from time to time.

The report under consideration covers the various aspects of obstetrical education in this country, viz., undergraduate and graduate courses for medical students and physicians, the obstetrical education afforded nurses and nursing attendants the training of midwives, and the information available for the laity and for social workers. Surveys were made of existing facilities, generally by the use of questionnaires, and very thorough studies, based on these findings, are presented. While it is impossible to summarize such a mass of statistical material, it can be stated that evidence is presented to show that the situation is susceptible of considerable improve-

ment. It is clear that there is need for more time in the curriculum and better clinical facilities for the obstetrical education of medical students. The same is true as regards opportunities for advanced work by physicians desiring to improve themselves along obstetrical lines, whether intending to specialize or not. The fact is stressed that at present the midwife is indispensable, as she attends about 15 per cent of the births in the United States as a whole, and in some states as many as 40 to 50 per cent. The necessity for proper training of these women is emphasized, and we are reminded that at present there are practically no provisions in this country for such training. We should either train the midwife or eliminate her (we are doing neither), and as it does not seem feasible at the present to eliminate her, adequate training should be provided.

To sum up, it can be said that this book is a most admirable presentation of the subject. Copies have been sent to the deans of the medical schools and to the heads of their obstetrical departments, and it is to be hoped that these authorities will peruse the material thoughtfully, and will take steps to improve their obstetrical departments to the fullest extent.

The book is published by the Century Company of New York and is a volume of 302 pages.

MISSISSIPPI STATE MEDICAL ASSOCIATION NEWS

L. S. Lippincott, Editor

Jacob S. Ullman, Associate Editor

D. W. Jones, Associate Editor

THAT WE MAY KNOW EACH OTHER BETTER

Dr. Milton Waldrop Robertson was born at Dolomite, Alabama, November 2, 1888. He is a graduate of the Ensley, Alabama, High School, and received his medical degree from the Medical School of the University of Alabama in 1915. He located at Rienzi, Mississippi, August, 1915, and was licensed to practice medicine in Mississippi by the State Board of Health in October, 1915. He practiced medicine at Rienzi until August, 1917.

In June, 1917, Dr. Robertson volunteered his services to the Surgeon General of the United States Army, was examined at Meridian, received his commission as First Lieutenant on June 20, 1917, and was called into active service on August 8, 1917, at Washington, D. C. He was sent to England September 8, 1917, and assigned to the English army on arrival at London. He served in the war hospital at Bangour near Edinburgh, Scotland, and was then ordered to France on December 1, 1917, for duty with the 47th London division, B. E. F. He served with this division until February, 1919, when he was ordered back to the United States and assigned to duty as assistant camp surgeon at Camp Gordon, Georgia. He was discharged from Camp Gordon, September 9, 1919, and returned to his former practice of medicine at Rienzi on September 15, 1919.

Dr. Robertson was elected councilor of the Mississippi State Medical Association at Biloxi

in 1924 and reelected at Vicksburg in 1930. He was appointed County Health Officer of Alcorn County in 1925 and has served in this capacity since. He moved from Rienzi to Corinth in January, 1931.



MILTON WALDROP ROBERTSON, M. D.
Corinth, Mississippi
Councilor Third District, Mississippi State
Medical Association

During his residence in Mississippi, Dr. Robertson has been an active member of the Mississippi State Medical Association. He was State Commander of the American Legion in 1926 and has held various offices in the Legion before and since that time.

CALENDAR

July 4 — Staff of George C. Nixon Memorial Hospital, Electric Mills, 8 P. M.; Staff of Baptist Hospital, Jackson, 7 P. M.; Staff of South Mississippi Charity Hospital, Laurel, 7 P. M.; Staff of Meridian Sanitarium, 7:30 P. M.

July 5 — Staff of King's Daughters' Hospital, Brookhaven, 7:30 P. M.

July 6 — Staff of Dr. F. G. Riley's Children's and Maternity Hospital and Clinic, Meridian, 7 P. M.; Staff of Chamberlain-

Rice Hospital, Natchez; Staff of Vicksburg Infirmary, 7 P. M.; Staff of Rush's Infirmary, Meridian, 7 P. M.

July 7 — Staff of McRae Hospital, Corinth, 2 P. M.; Pike County Medical Society, McColgan Hotel, McComb, 7 P. M.

July 8 — Natchez Medical Club, 1 P. M.; Staff of Anderson Infirmary, Meridian, 7 P. M.

July 11 — Staff of South Mississippi Charity Hospital, Laurel, 7 P. M.; Staff of Vicksburg Sanitarium, 6:30 P. M.

July 12 — Staff of Natchez Sanatorium, 7:30

P. M.; Staff of Tupelo Hospital, 7:30 P. M.; Issaquena-Sharkey-Warren Counties Medical Society, Cary, 7 P. M.; Winston County Medical Fraternity, Louisville.

July 13—Harrison-Stone-Hancock Counties Medical Society, King's Daughters' Hospital, Gulfport, 7:30 P. M.; Staff of King's Daughters' Hospital, Greenville, 7 P. M.

July 14—Homochitto Valley Medical Society, Natchez; Staff of Jackson County Hospital, Pascagoula, 8 P. M.; Staff of Vicksburg Hospital, 6:30 P. M.; Staff of Aberdeen Hospital, 8 P. M.

July 18—Staff of South Mississippi Charity Hospital, Laurel, 7 P. M.

July 19—Central Medical Society, Jackson, 7 P. M.

July 21—Staff of Natchez Charity Hospital, 8 P. M.

July 22—Natchez Medical Club, 1 P. M.

July 25—Staff of South Mississippi Charity Hospital, 7 P. M.

FROM OUR PRESIDENT

A report from our efficient Mississippi Editor of the New Orleans Medical and Surgical Journal, Dr. L. S. Lippincott, shows that only ten county editors sent in news for the month of May. Eighteen counties have no editors in spite of the fact that the Presidents of the component county societies have been asked repeatedly to appoint county editors. It is hoped and earnestly requested by your State President that these county editors be appointed at once and that those already appointed *function*, and *continue to function*. Dr. Lippincott is an untiring worker for the Journal and more particularly for the Mississippi State Medical Association. Please help him make the Mississippi section well worth while.

I have made the following appointments since our State meeting in Jackson: Dr. R. B. Cunningham, Booneville, was appointed Vice-President for North Mississippi. This was made necessary since Dr. B. S. Guyton, Oxford, the Vice President elected, asked to be relieved from the office. Dr. F. J. Underwood was reappointed a member of the Committee on Public Policy and Legislation. Other members of this committee whose time has not expired are Drs. Henry Boswell, Sanatorium, and W. H. Anderson, Booneville. Dr. J. R. Williams, Houston, has been appointed a member of the Committee on Constitution and By-Laws. Other hold-over members of the committee are Drs. J. S. Ullman, Natchez, and W. H. Frizell, Brookhaven. Chairmen have been appointed for the following sections:

Medicine—Dr. A. H. Little, Oxford.

Surgery—Dr. V. B. Philpot, Houston.

Hygiene and Public Health—Dr. H. C. Ricks, Jackson.

Eye, Ear, Nose and Throat—Dr. C. C. Buchanan, Hattiesburg.

Radiology—Dr. J. A. Beals, Greenville.

James M. Acker, Jr.,
President.

REQUESTS FOR HISTORY

In this issue is a page commemorating the achievements of Dr. R. M. Boyd of Aberdeen in the World War, which is a reproduction of a page in the History. Since such matters are truly a part of the history of the Association, we request that all who know of other awards made to Mississippi doctors will notify us. We say "who know of others' awards" because the men who received them will not tell us. This was the case with Dr. Boyd, to whom the publication of this page will come as a greater surprise than to anyone else.

We wish also to get photographs of those of our members who died in service. There were four of these: Browne of Kosciusko, Gayden of Leland, Kitchens of Stray Loon, and Steen of Vaughan. We have secured photos and records of Drs. Gayden and Browne, but considerable correspondence has failed to produce anything relating to either of the other two. Almost without exception, there are no replies to our letters. We will be very grateful for assistance.

E. F. Howard, Historian.

PLEASE TAKE NOTICE

Natchez, Mississippi,
June 1, 1932.

"Dear Editor:

"Thanks for the map. On second thought I think I shall withdraw the expression of gratitude, because I was enjoying a most pleasant June lassitude until I took in the meaning of that map. It makes me feel like making remarks. And I'm hot anyhow.

"For eight years we have been trying to give the members of the Association a column of their own and after eight years one-fourth of the counties have not yet nominated a county editor. And, bless goodness, only ten out of sixty-one county editors sent anything in last month. Isn't that enough to make a blind monkey bat his eyes? It's the same old crowd that sticks on the job all the time.

"The slackers probably won't even see this, but if they do I hope they have sufficient conscience left to make them feel uncomfortable.

I'm very much afraid however that they are 'corrupt and content,' or in plain English, they have acquired a large quantity of don't-give-a-damnness. The part that gets under my skin, however, is that it is usually the lethargic officers and the don't-give-a-damn members that are always complaining that the Association is run by the same clique all the time.

"Well, please tell 'em for me to depart immediately for that famous winter resort.

"Thanks for listening, I feel better now.

"Gratefully yours,

J. S. Ullman.

"P. S.: The other Associate Editor is such a good church member that I know he can exhort the Brethren powerful. Tell him to get busy and wrestle with their spirit."

FROM PIKE COUNTY

I am just in receipt of your map of the Counties showing the co-operation, and the non-co-operation of the Secretaries and County Editors of the County Medical Societies, for last month.

The Pike County Medical Society was organized the night of April 4, 1929. Dr. L. W. Brock was elected President, Dr. I. E. Stennis elected Secretary. At the December, 1929, meeting of the Society, Dr. L. W. Brock was reelected President to serve through 1930; Dr. I. E. Stennis re-elected Secretary to serve through 1930. At the December, 1930, meeting, Dr. I. E. Stennis was elected President to serve through 1931; Dr. R. H. Brumfield was elected Secretary to serve through 1931.

The Society's regular meeting date is the first Thursday evening of every month. Our June, 1931, meeting was to be on Thursday night (7:30 P. M.), June 4, but Dr. L. D. Dickerson, of McComb, died at 2 o'clock that afternoon and the meeting was called off. This was the first monthly meeting the society has missed since we organized. Our next meeting was on July 2.

Since the Society's last meeting May 7, the writer had become very physically unfit, having developed some chronic cardiac trouble that the doctors diagnosed as an angina, of the pseudo type. When the Society met in July, the writer was absent from the first meeting since the Society was organized, April 4, 1929, and due to the very slow progress made towards improve-

ment in my cardiac trouble, I did not get back to a society meeting until May 26—last week. The regular meeting for May, that should have been held on May 5, was postponed because of the Medical Association that met in New Orleans. I am not familiar with the particulars, but I know it had something to do with the A. M. A. meeting at New Orleans. Anyway, I was very glad indeed, to get back with the society after a year's absence.

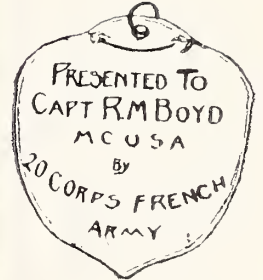
Let's make the next issue of our Journal representative of Mississippi.

Some of the doctors in Mississippi will pick the Journal up next month and say, 'This is a fine copy of the Mississippi Journal'; some others will say, 'It looks like we might get up a better Mississippi Medical Journal.' Even so. Dr. Lippincott, the Mississippi Medical Journal will be just as fine, and just as full of good nourishment as the Society Secretaries and the County Editors will have it. Just think, suppose the Secretary of every Medical Society, and every County Editor in the state should send you a report every month, or as often as the society meets, you can imagine what the results would be. On the other hand, suppose none of the Secretaries or County Editors send in reports from their Societies, what would be the result? To come right down to cases, when a County Medical Society fails to send in a report to the State Editor, so far as that particular society is concerned, the State of Mississippi has no Medical Journal for that month. If the state editor receives reports from 82 County Editors for the month of June, then we would expect the Mississippi Medical Journal to be 100 per cent as good as it could be, but if the State Editor received reports from only ten County Editors, as he did for the month of April, then the Journal will be just 100 per cent as good as it could be. It takes only a few minutes of the Society Secretary's time each month to make his report to the State Editor, even if his society meets monthly, and just a few minutes every few days during the month and the County Editor can get in a report every month. Dr. Lippincott certainly deserves the fullest cooperation of all the County Societies, and I hope he gets a larger share of that cooperation in the future than he has had in the past.

I. E. Stennis.

McComb, Mississippi,
June 2, 1932.

LEST WE FORGET



RICHARD M. BOYD, M. D.
Aberdeen, Mississippi



THE UNITED STATES OF AMERICA
to all who shall see these presents, greeting:

This is to certify that

The President of the United States of America
pursuant to act of Congress approved July 9, 1918,
has awarded to

RICHARD M. BOYD

A Silver Star

for gallantry in action

at Cuisy, France, on the night of October 7, 1918,
while serving as first lieutenant, Medical Corps,
attached to the 146th Field Artillery, American
Expeditionary Forces.

Given under my hand at the City of Washington
this twentieth day of March, 1929.

JAMES W. GOOD,

Secretary of War.

Recorded in the Office of

The Adjutant General

(The French medal is reduced to one-half size).

ISSAQUENA-SHARKEY-WARREN COUNTIES
MEDICAL SOCIETY

The monthly meeting of the Issaquena-Sharkey-Warren Counties Medical Society was held on June 14, at the Y. W. C. A., Vicksburg, with fifteen members and two guests present.

Papers and Discussions—Dr. G. P. Sanderson, Vicksburg, Chairman:

(1) Appendicitis—Dr. W. H. Parsons, Vicksburg.

Discussed by Drs. P. S. Herring, Vicksburg; J. A. K. Birchett, Jr., Vicksburg, and Dr. D. A. Pettit, Vicksburg. Dr. Parsons closed.

(2) Anaesthesia During Labor.—Dr. N. B. Lewis, Vicksburg.

Discussed by Drs. S. W. Johnston, Vicksburg; D. A. Pettit, Vicksburg; P. S. Herring, Vicksburg; J. E. Quidor, Vicksburg; W. C. Pool, Cary; W. H. Scudder, Mayersville, and H. S. Goodman, Cary. Dr. Lewis closed.

(1) Pyelitis.—Dr. G. P. Sanderson, Vicksburg.

Discussed by Drs. E. H. Jones, Vicksburg; Dr. W. H. Parsons, Vicksburg; L. S. Lippincott, Vicksburg; D. A. Pettit, Vicksburg; W. H. Scudder, Mayersville. Dr. Sanderson closed.

Dr. J. R. Perry, Rolling Fork, was elected to membership in the society.

On vote of the society the President appointed a committee to study the sales tax as it affects doctors, and to make recommendations at the next meeting of the society as to the best means of its collection. The committee is: Drs. W. H. Parsons, Vicksburg, Chairman; B. B. Martin, Vicksburg; A. Street, Vicksburg; W. C. Pool, Cary; and W. H. Scudder, Mayersville.

The meeting closed with a dutch lunch.

The next meeting of the Society will be held at Cary on July 12, at 7 P. M., at which time the members will be the guests of the doctors of Sharkey County and their wives.

The program committee for the July meeting is: Dr. J. E. Quidor, Vicksburg, Chairman; Dr. H. B. Goodman, Vicksburg; Dr. W. C. Pool, Cary; Dr. M. J. Few, Rolling Fork; Dr. A. K. Barrier, Rolling Fork; Dr. E. B. Stribling, Rolling Fork; Dr. J. B. Benton, Valley Park, and Dr. W. H. Scudder, Mayersville.

CHOCTAW COUNTY

Dr. A. E. Reed's residence was destroyed by fire a few weeks ago. He sustained a very heavy loss.

Dr. Clyde Ruff attended the meeting of the American Medical Association in New Orleans and reports an enjoyable and profitable trip.

The Winona District Medical Society meets at Ackerman June 14.

J. James, County Editor.

Ackerman, May 31, 1932.

COPIAH COUNTY

We regret to report that Dr. J. M. Dampeer, Crystal Springs, is very weak, and that his condition has become serious.

Dr. Dampeer is one of Mississippi's best men and physicians and loved by all who know him. He is a former member of the State Board of Health.

W. L. Little, County Editor.

Wesson, Miss.,
June 1, 1932.

A BOOST

Allow me to thank you for your earnest work as Editor for the Mississippi Section of the New Orleans Medical and Surgical Journal. I have always noticed what you are doing and have wanted to compliment you before. Please accept my thanks personally and also in the name of

the Mississippi State Medical Association. I know of no man in the Association that could handle it as well.

Jim Acker, Jr.

Aberdeen, June 2, 1932.

NEWTON INFIRMARY

The Newton Baptist church was filled to capacity on the evening of May 25 when graduation exercises were held for the nurses who had completed their three years' training in the Newton Infirmary. A most impressive program was rendered.

All the doctors of Newton, who compose the staff, headed by Dr. M. L. Flynt, were seated on the platform as were, also, the ministers who had parts in the program. The three receiving diplomas were Misses Sallie Bender, Bessie Perkins and Hazel McBrayer.

The program was carried out as follows:

Invocation—Rev. C. M. Crossley.

Solo—"If Winter Comes," by Tennent—Mrs. H. B. White.

A Message from the Staff—Dr. T. E. Jarvis.

Solo—"Service," by Cadman—Mr. Jack Perkins.

Reading—"The Show Must Go On," by Ann Fuller—Miss Mary James.

Address—Judge D. M. Anderson.

Duet—"I've Done My Work," by Carrie Jacobs Bond—Mrs. R. S. Majure, Mrs. W. P. Cunningham.

Nightingale Pledge—Senior Class.

Presentation of Diplomas and Pins—Dr. M. L. Flynt.

Benediction—Rev. J. J. McInnis.

Accompanist—Mrs. Roy Baker.

The interest that was shown by the large attendance attests the confidence the people of this community have in the Infirmary and the work that is being done there.

JACKSON COUNTY

At the meeting of the Jackson County Medical Society held on Monday, June 6, it was decided to change dates of meeting to the second Thursday in March, June, September and December and the time to 7:30 P. M.

This conforms to a change made in date of staff meetings of the Jackson County Hospital which in future are to be on the second Thursday of each month at 7 P. M. from October to March, inclusive, other months at 8 P. M.

Dr. F. O. Schmidt who is completing his internship at Charity Hospital, was elected a member of the Society. Dr. Schmidt will locate at Ocean Springs, his home town, and will be associated with Dr. O. L. Bailey.

The home of Dr. O. L. Bailey of Ocean Springs was destroyed by fire recently, entailing a loss of

\$8000 which was only partly covered by insurance.

Mesdames J. N. Rape, R. C. Eley, C. H. Gray and S. B. McIlwain and Misses Mary Elizabeth and Clara Eley attended a district meeting of the Woman's Missionary Society at Laurel June 8, Mrs. McIlwain remaining over for a visit with relatives at other points.

Dr. McIlwain, soon tiring of being his own boss, took R. B. and Fanie Pearl and departed, supposedly for a visit to relatives at Laurel, Sandersville and Waynesboro, but in reality to bring the madam home.

Drs. Purdue and Hinton of Mobile were guest artists at two tonsil clinics sponsored by the County Health Department and the County Hospital during the month of May, 31 sets of these sometimes obnoxious appendages being removed.

S. B. McIlwain, County Editor.

Pascagoula,
June 11, 1932.

PIKE COUNTY

During the past 60 days the following physicians have returned to this county after four months of special study at Tulane University: Dr. J. E. Brumfield, Magnolia; Dr. J. M. Smith, Magnolia; Dr. W. C. Hart, McComb; Dr. E. M. Givens, McComb; Dr. L. W. Brock, McComb; Dr. T. E. Hewitt, Summit; Dr. W. S. Lampton, Magnolia; Dr. W. M. Biggs, Osyka.

The study was made possible by the cooperation of the Commonwealth Fund with the State Board of Health and with these men.

T. Paul Haney, Jr., County Editor.

McComb,
May 27, 1932.

PIKE COUNTY MEDICAL SOCIETY

The Pike County Medical Society is enjoying a program whereby the Pike County physicians and members of the medical profession in neighboring counties are given an opportunity to attend a series of lectures and clinical illustrations from certain outstanding medical authorities. It is the plan to have at least eight, and possibly ten, such lectures and "clinical days" during 1932. On the day of the lectures the speakers are at the city auditorium during the afternoon for consultations with physicians and for observation and examination of any patients physicians may wish to submit to them. Dinner is served, and the lectures are given in the evening. Speakers thus far have included:

March 3—Dr. Charles Bloom, Professor of Pediatrics, Tulane University: "Uses of Calcium in the Treatment of Certain Respiratory Diseases."

April 15—Dr. James G. Carr, Professor of Medicine, Northwestern University, Medical

School, Chicago: "Jaundice."

June 2—Dr. Edward William Alton Ochsner, Professor of Surgery, Tulane University: "The Complications of Appendicitis."

On May 1, Dr. H. B. Hatcher resigned as secretary of the society. Dr. Hatcher left the county during the month of May to locate in Baton Rouge, Louisiana. At the May meeting of the society Dr. T. Paul Haney, Jr., was elected secretary to fill the vacancy made by Dr. Hatcher's resignation. Dr. Haney resigned the office of editor for the society and this office will be filled in the near future by appointment from the president.

T. Paul Haney, Secretary.

HARRISON-STONE-HANCOCK COUNTIES MEDICAL SOCIETY

At the meeting of the Harrison-Stone-Hancock Counties Medical Society on June 1, the following men were appointed as editors for their respective counties by Dr. C. M. Shipp, President, Bay St. Louis:

Harrison County—Dr. G. F. Carroll, Biloxi.

Hancock County—Dr. D. H. Ward, Bay St. Louis.

Stone County—Dr. S. E. Dunlap, Wiggins.

COPIAH COUNTY

I appreciate your efforts and know you are on the job. I expect to write all decent happenings concerning doctors, but we change very little in Copiah from the usual, though at this time we are looking up because truck and vegetable prices are fair and yields very good.

W. L. Little, County Editor.

Wesson,
June 1, 1932.

WILKINSON COUNTY

Drs. C. E. Cathings and J. W. Brandon, Woodville, and Drs. W. I. Marsalis and S. E. Field, Centreville, attended the recent meeting of the A. M. A. in New Orleans. All reported that a very interesting program was presented and the short vacation was enjoyed.

Miss Mabel Richardson, Superintendent of Nurses of Field Memorial Hospital, and first President of the newly organized Five County Nurses' Association (Pike, Copiah, Lincoln, Walthall, Wilkinson), was hostess to this body at its regular meeting, May 20, at the hospital. Miss Syd Vaughn, Brookhaven, gave a very interesting paper on "The High Lights of the Biennial in San Antonio." This paper was discussed by Miss Ann Patterson of McComb.

S. E. Field, County Editor.

Centreville,
June 7, 1932.

WINSTON COUNTY

Dr. W. W. Parks made a trip to Greenville last week, visiting kin people and fishing.

Dr. E. L. Richardson spent a few days at Moss Lake fishing and says he had a splendid time and plenty of the finny tribe at his command.

The writer's wife and Marion, Jr., are visiting friends in Memphis and Jackson, Tennessee, this week.

The last few days of hot weather has caused quite a few cases of colitis to develop among the children and infants through this section.

The city election is on with its usual degree of enthusiasm. The writer was slated as a member of the Board of Aldermen, but possibly wisely withdrew from the list. Dealing with the public is strenuous enough without mixing up in politics. The Griffin Lumber Company, now at Estes, has opened up a sawmill business. We first understood that Dr. Diamon of Jackson would do the practice, hoping to welcome him in our city, but we understand he has declined to accept the contract. We are watching with interest our colleagues as they are being placed in positions of trust and honor, and hope they may all make good.

M. L. Montgomery, County Editor.
Louisville,
June 7, 1932.

CLAY COUNTY

After studying your geographic outline of the activities of the various county editors, I find most of them were in the same condition as myself for last month. In fact this inactivity must be due to one of three things, to-wit: Depression and blues, fishing, or too busy to write. Mine is the first mentioned.

A recent call on the health officer of this county indicates that the health situation is far above the usual for this season, as very few contagious diseases are being reported.

On Sunday, May 22, at high noon Miss Margaret Dotson, the daughter of the writer and wife, was married to Dr. Charles Whitley Emerson of Hernando, Mississippi. After a week's trip through Florida, Georgia, North and South Carolina and Tennessee, they returned to Hernando, where they will make their future home.

The Northeast Mississippi Thirteen Counties Medical Society will meet in Amory on Tuesday, June 21.

As I have said on a former occasion, this is by far the biggest, if not the best medical society in Mississippi and every doctor within reach should attend, as there are splendid papers, lots of fun and plenty of food to eat, so why not ar-

range to attend?

Lon W. Dotson, County Editor.
West Point,
June 6, 1932.

IN MEMORIAM

WILLIAM IVERSON MARSALIS, M. D.,
Centreville

The contemplative mood in which we are left when a familiar form "passes over the bar" affords alike an apt opportunity for introspection and the proper estimate of that one, from whom we have been separated.

The subject at hand, whose name heads this page, had for nearly thirty-four years moved in familiar and confidential intercourse with the population of this section of the country; and, his taking removed one of the few remaining examples of a glorious class of old servitors—"the family doctor,"—the "country physician;" the heroic knights of the saddle bags and the pocket case.

Honor to the memory of that fast fading sight, once so familiar—the weary and worn travelers of dark and devious country by-ways—seeking out the sufferers whom their skill may relieve, and, for which, as often as not, receiving nothing in an earthly sense for this taxing toil.

Iverson Marsalis was of these and often, how often, I know not, have I seen him with close-buttoned-overcoat, breasting the storm, over muddy roads, to see some sufferer who by reason of this self denial risk, he might relieve.

Dr. Marsalis was born ten miles north of Liberty, Amite County, Mississippi, on March 6, 1873. His parents, Dr. Thomas Hitchins Marsalis, and wife, Eula Kinnebrew, were also natives of this county. The subject completed the course of study at Liberty College and studied medicine at Louisville Medical College, Louisville, Kentucky, from which school he graduated with the degree of Doctor of Medicine in his twenty-first year. While there, he received the medal as the best student in the college for general practice, given by Dr. Galt.

A subsequent attendance on post-graduate lectures for two years, at Tulane University, completed his institutional preparation for a professional work, which, augmented by his knowledge of medicine through some thirty-four years of arduous practice, made of him when he laid down his armor—one of the best practitioners who ever stood beside a bed of sickness in this entire country.

On the occasion of the dedication of the Field Memorial Hospital of this place, some three years ago—the stellar attraction of the occasion was the address of Doctor Rudolph Matas, of New

Orleans, who was present for this special feature—this writer heard him say, (Dr. Matas) “for twenty-five years, this man (Dr. Marsalis) has been coming to me with his difficult cases for consultations and advice—and every time, when, looking out, I would see him coming, I would say, ‘here he comes, and bringing me another hard nut to crack;’ and, if I were seriously ill, I know no one to whom I would more willingly entrust myself.”

When it is recalled that this was the voluntary tribute from one of the world’s greatest recognized medical authorities, it, in my opinion, involves one of the highest tributes from accepted ability to true worth that it has ever been my privilege to hear and witness from any one.

Doctor Marsalis was married to Dollie McGehee of Amite County, in March, 1894, who, with five children (one son, Iverson) survive to honor his name and deplore his loss.

The death of Doctor Marsalis was not entirely unexpected—for more than three years the grim monster has insistently attended him—and his fortitude was never more clearly shown than during this period of strife with the “insistent foe.” He stayed yet with his people, who, in suffering, called and, when scarce able to stand, he answered, “here.”

Doctor Marsalis spent a life of great activity, and that served as an added strain on a not vigorous body, and thus his recognized professional and intellectual attainments were an accumulated increment purchased at an expense of his physical man, illustrating sadly that trite saying—“the ant hath wings to her own destruction.”

But the end had come, his rounds were all made—his were the honor of faithful service, rendered unto his kind; may he have found ere now, the magic balm of which his calling was a type—the prescription of that Greatest of Doctors, who, years ago, beside Genessaret prescribed a remedy for the race, and made death a synonym of rest: “If a man die, shall he live again?” No, not dead will we say—but, just away.

A Friend.

LEFLORE COUNTY.

Drs. F. M. Sandifer and W. B. Dickins attended the commencement exercises of the University of Mississippi on May 30, at which time their daughters, Misses Lizette Sandifer and Marion Dickins received their A. B. degrees.

John Parish of Greenwood received his two years medical certificate.

Dr. W. H. Frizell and family of Brookhaven were recent visitors in the home of Mrs. Herbert McShane, the doctor’s daughter

Dr. H. L. Shannon of Lyon was a recent visitor to Greenwood.

Dr. R. A. Hennessey and Dr. Ed. Clay Mitchell of Memphis visited Greenwood this month.

Dr. J. D. Weeks, of Ackerman is a frequent visitor in the home of his daughter, Mrs. Henry Kennedy.

Dr. John A. Crawford has returned from a visit to Memphis.

Dr. G. H. Wood and family of Batesville were recent visitors to friends in Greenwood.

W. B. Dickins, County Editor.
Greenwood, June 7, 1932.

PONTOTOC COUNTY.

The many friends of Dr. A. H. McGregor, Randolph, were sorry to hear of the death of his father, Mr. J. J. McGregor, who was 82 years old. He died May 22, 1932.

Dr. J. A. Rayburn and son, Dr. T. H. Rayburn, recently of the Natchez Charity Hospital, have moved to our city this week. We are glad to have the Dr. Rayburns with us.

We are all getting ready to attend the meeting of the Northeast Mississippi Thirteen Counties Medical Society at Amory, June 21.

R. P. Donaldson, County Editor.
Pontotoc, June 8, 1932.

NUXUBEE COUNTY.

Dr. and Mrs. L. B. Morris of Macon and Dr. J. L. Melvin of Shuqualak attended the meeting of the A. M. A. in New Orleans.

Dr. C. W. Salter was painfully injured in an automobile accident in Memphis, Tenn., a few weeks ago when his car was struck and turned over by another car in the hands of a reckless driver. Dr. Salter’s left arm and hand were badly bruised and lacerated, and he has been unable to attend to but little of his practice since. He has had to return to Memphis for further examination and treatment.

Drs. H. C. Ricks and C. C. Applewhite from the Health Department in Jackson attended the May Day program in Macon on May 3. Out-door exercises and dances were given by the pupils of the Grammar School under the direction of Miss Mary Lillian Peters, instructor in school music. Dr. Applewhite gave a very interesting talk on health matters. As a May Day feature a large number of the children of the Grammar School were given toxin-antitoxin by the county health officer.

You are giving us a fine Journal and I will do what I can to aid you in keeping it up.

E. M. Murphey, County Editor.
Macon, June 7, 1932.

BOLIVAR COUNTY.

The following from Bolivar County attended the meeting of the American Medical Association in New Orleans: Dr. and Mrs. L. B. Austin, Rose-dale; Dr. and Mrs. J. D. Simmons, Gunnison; Dr. H. T. Cumming, Pace; Dr. E. R. Nobles, Rose-dale; and Dr. C. W. Patterson, Rosedale.

It was with regret that we learned that Mrs. Rosa Belle Shelby had severed her connection with the King's Daughters' Hospital here. She had given general satisfaction and shown her usual efficiency in the work.

It seems, to say the least, unfortunate that at this time when those of our profession are called upon to do more and more charitable work among the poor and unfortunate that the members of the legislature should have found it desirable to heap further taxes upon us. While none of us will, of course, let this in any way interfere with our usual methods of dealing with these unfortunates, still the thought that perhaps it is unappreciated rankles. Especially do we feel this way when it appears as if the shyster and the non-professional might have had some hand in the matter. Let organized medicine teach the public that we favor all appropriations for the prevention of disease even though it be to our financial disadvantage.

C. W. Patterson, County Editor.
Rosedale, June 8, 1932.

SCHARKEY COUNTY

Dr. Rex Goodman of Mobile, Ala., visited his mother, Mrs. B. Goodman, Cary, recently.

Dr. and Mrs. Robert Little of Oxford, spent several days at Cary, with Mr. and Mrs. L. F. Crews. Dr. Little enjoyed fishing at Eagle Lake.

Miss Ethel Goodman, daughter of Dr. H. S. Goodman of Cary, is home for the summer. Miss Goodman taught at Ocean Springs.

Dr. and Mrs. M. J. Few, Rolling Fork, have had relatives visiting them.

Mrs. E. B. Stribling, Rolling Fork, is visiting relatives in Hattiesburg.

The Sharkey County doctors and their wives will entertain the doctors of Warren, Issaquena and Sharkey Counties on July 12 at Cary.

W. C. Pool, County Editor.
Cary, July 9, 1932.

MONROE COUNTY.

June days are here again and it is time to register for Monroe County, yet I fear that I shall not be able to furnish you any news worth printing. Suffice it to say that "we are all here" and are on the firing line for medical progress and fellowship. While Monroe County is a large county and one of the best in our state, we have fewer doctors than many smaller counties. This

fact will account for my dearth of news items concerning our brotherhood.

Dr. R. M. Boyd, of Aberdeen, has been in one of the Memphis hospitals—as I stated in my last communication—but I am very glad to be able to say he is back at this time and I understand is much improved in health. I have heard of no other member of our family that has been sick since my last communication.

This being the most healthy time of year, our doctors are having but little hard work to do. Perhaps some of them are fishing a bit and others are keeping up with any other business interests they may have, while all are wondering how they may make ends meet.

I have heard that Dr. E. D. Boozer, who lives in the extreme eastern part of the county is turning much of his thought to dairying. He is fortunate in that he can live at home and board himself.

Dr. B. C. Tubb, of Smithville, took time off to spend several months in post-work. Since his return, several months ago, I have seen nothing of him. He was a mighty good doctor before going away and I presume having learned everything new, he has settled down and will keep his store of knowledge to himself. While this is not quite fair to those of us who could not go with him, I am sure he is giving his clientele the full benefit of his superior skill and knowledge. His people are very fortunate for he is a fine fellow and a faithful, conscientious physician.

My old time friend, Dr. G. T. Tubb, formerly of Athens, has become a citizen of Aberdeen, since the death of Dr. Dilworth last winter. I understand he is doing lots of work and I am sure he is happy; for he is "built that way." He is a splendid man and Aberdeen is to be congratulated.

Dr. McCowan, formerly of Nettleton, one of my best friends and as clean and upright man as I know, is in Aberdeen, too. I have seen nothing of him since his change of residence, but he deserves success and no doubt it will come to him.

I could not fail to make mention of my splendid friend, Jamie Acker, our president of the State Medical. He made me a nice long visit on his return from Jackson in April. He told me much of the doings of the Association. I was so glad that he came, especially since I had been kept from the meeting on account of being "sick abed" myself at the time of the meeting. You all know Jamie, hence anything I might say in his praise would be superfluous—suffice to say, he is my friend and I love him.

What about Dr. Summerford of Smithville, I hear some one say? I have not seen him for many moons, but he "is around here" just the same. He is a most unique character. Fearless

and frank, true to his ideals, full of pep and energy, Chesterfieldian in appearance, and above all else, he is loyal to his friends.

In the extreme southeasterly part of the county there are two doctors. I rarely see them, but from reports from their hundreds, I might say thousands, of friends, they are doing their bit to carry on for themselves and to alleviate distress in any form or fashion as it may present among their people. One of these splendid men is a relative of mine, Dr. W. W. Bryan of Hamilton, the other is Dr. Wheeler Darracott, same address.

Next I will mention Dr. C. E. Boyd, of Hatley—a suburb of Amory. Dr. Boyd is, indeed, a prince among men—not only is he one of nature's noblemen, but he is an up-to-date doctor. He has a large territory to cover and a very large and appreciative clientele. Fortunate indeed, are they to be able to command the service of such a man and such a fine doctor.

In addition to those mentioned already, there are Drs. Kirk, Burdine, I. A. Boozer, Ewing and Reed, all of Amory. If it be true, and it is, that we love each other better as we know each other better, it is enough to say, that I know these latter even better than they know themselves.

This is a list of my confreres. It is said that a Roman matron presented her twelve sons, all able and willing to bear arms for Rome with these proud words, "these be my jewels."

In the same spirit of pride and affection I can say, as did she, referring to all whom I have mentioned above, "these be my jewels;" for they are all my friends. "What a joy comes into my soul" when I think and say that I have never allowed envy or jealousy to come into my heart when I have seen other doctors grow in popularity, even though I may have seen those whom I have tried to serve as best I could, going to them for service.

I believe that Monroe's doctors are as good as the best in any county or state. If you do not know them, I pity you (and them).

G. S. Bryan, County Editor.

Amory, June 6, 1932.

NORTH MISSISSIPPI MEDICAL SOCIETY.

The quarterly meeting of the North Mississippi Medical Society was held at Holly Springs, June 15, at 6:30 p. m., at Stafford's Restaurant Banquet Room. Dr. H. P. Boswell, New Albany, President, presided.

The program included the following:

Invocation.—Rev. Golding, Holly Springs.

Dinner, "Dutch."

Business Session.

Scientific Section:

(1) Digestive and Infective Diarrheas in Children.—Dr. D. R. Moore, Byhalia.

Discussion opened by Drs. W. C. Lester and W. W. Phillips.

(2) Instrumental Correction of Prostatic Obstruction.—Dr. T. D. Moore, Memphis, Tennessee.

Discussion opened by Drs. R. G. Grant and George Brown.

(3) Diagnosis and Treatment of Seasonal Hay Fever.—Dr. A. H. Little, Oxford.

Discussion opened by Drs. Ira B. Seale and S. E. Eason.

(4) Anesthesia in Surgery of the Thyroid.—Dr. L. S. Brown, Water Valley.

Discussion opened by Drs. J. C. Culley and C. M. Speck.

(5) Traumatic Surgery of the Extremities. (A Motion Picture).—Courtesy of Davis & Geck, Inc., Brooklyn, New York.

Dr. J. M. Acker, Jr., Aberdeen, President of the Mississippi State Medical Association, was a guest of the society.

A. H. Little, Secretary.

ADAMS COUNTY.

Dr. C. A. Everett, Bude, recently elected surgeon and superintendent of the Natchez Charity Hospital, has taken over the duties of his office, Dr. Everett is making a study of conditions at the hospital and expects to submit recommendations for possible reductions in expenses at the next meeting of the board of trustees.

Dr. Everett is a native of Amite county, but has spent all except about one month of his forty-eight years in Franklin county, where his parents removed when he was a baby. He attended the public schools of Franklin county, is a graduate of Mississippi College, Clinton, and received his medical degree at the University of Louisville.

Dr. Everett has been in active practice at Bude since 1911, meanwhile serving Franklin county in the state legislature for one term, from 1916 to 1920; as mayor of Bude for one term; as a member of the board of trustees of the Bude High School for three terms, and as president of the board for two of these terms. He has been chief surgeon for the J. J. Newman Lumber Company at Bude and local surgeon for the Mississippi Central Railroad since 1918.

In 1925, Dr. Everett attended Tulane University where he did special work in roentgen ray and laboratory. In 1928, he served as assistant superintendent of the Natchez Charity Hospital. He is a member of the Homochitto Valley Medical Society, Southern Medical Association, American Medical Association, Southern Railway Surgeons' Association and the Mississippi State Medical Association.

Mr. George Dicks, who has been attending Vanderbilt University, is at home to spend his vacation with his parents, Dr. and Mrs. J. W. D. Dicks.

L. Wallin, County Editor.

Natchez, June 10, 1932.

EAST MISSISSIPPI MEDICAL SOCIETY.

Dr. T. L. Bennett, Meridian, Secretary, announced the program for the meeting of the East Mississippi Medical Society on the fairgrounds of Neshoba county, Thursday, June 6, at 2:30 p. m. as follows:

1. Carcinoma, Its Treatment with Special Reference to the Use of Deep Therapy X-ray.—Dr. Willis Walley, Jackson, Mississippi.

Discussion opened by Drs. C. H. Harrison and C. R. Stingily.

2. Tularemia.—Dr. J. L. Parkes, Union.

Discussion opened by Drs. A. L. Majure and T. D. Bordeaux.

3. The Doctor in the Court Room.—Hon. Marion W. Reily, Meridian.

Discussion opened by Drs. H. S. Gully and I. W. Cooper.

Barbacued meats and refreshments were served through the courtesy of the Neshoba county doctors. The ladies were invited.

HARRISON-STONE-HANCOCK COUNTIES MEDICAL SOCIETY.

Hurriedly I acknowledge receipt of your letter requesting that something be done about news from this section of the State. Like you, I thoroughly agree that something should be done about it—and for speaking out loud I got socked with the job. Serves me right, I should have kept quiet.

The Harrison-Stone-Hancock Counties Medical Society met at the King's Daughters' Hospital in Gulfport as usual, with the same old attendance, a few new faces but most of them old timers and I must say that the attendance is usually very good. A most interesting paper was submitted by the debonair Doctor LeBaron, the title, "Obstetrical Monstrosities." The paper was most excellent and handled in a masterful manner by a man of wide experience in this line. A rather liberal discussion was indulged in by a number present, but little was added to a subject that had been thoroughly covered by Dr. LeBaron.

A subject was introduced for general discussion by the Secretary, one that was discussed very thoroughly and will probably have far reaching consequences—the decidedly unequal distribution of service from the various state charity hospitals in Mississippi. Many instances were presented showing that the coast counties are receiving and have in the past received practically no assistance whatever from the state charity hospitals in the

care of the indigent poor, sick and afflicted of this region. Several instances were shown where admission to state charity hospitals had been refused to most needy patients and in several instances the patients forced to turn about and go back to the coast. The several coast hospitals are and have been caring for their charity cases with assistance from the cities and a small pitance from one or two counties and this fact being conclusively shown, a motion was made and passed that the Harrison-Stone-Hancock Counties Medical Society go on record and so inform the State Medical and Hospital Associations that they favor the complete abolition and discontinuance of all state charity hospitals now in existence in Mississippi.

It is contemplated to take this matter up in more concrete form at the next meeting of the State Medical Association with the definite determination to see this fact accomplished.

I leave this thought with you.

George F. Carroll, County Editor.

Biloxi, June 8, 1932.

WASHINGTON COUNTY.

Dr. John Archer attended his class reunion at Vanderbilt University June 3-4-5, and reports a great time.

Drs. Payne, Hirsch and Beck have announced that they will occupy the newly remodeled second floor of the Weinberg Building about July 1. This will give them much better and larger office space and will be modern in every respect.

Dr. C. P. Thompson made a trip to New Orleans to bring back his daughter who has been attending Sophie Newcomb.

Dr. J. C. Pegues has returned from a two weeks' vacation trip to Atlanta, and other parts of Georgia.

Dr. H. L. Shannon, formerly of Clarksdale, has moved to Longwood, in Washington County, where he will practice his profession.

F. M. Acree, County Editor.

Greenville, June 9, 1932.

MATTY HERSEE HOSPITAL, MERIDIAN.

Dr. G. Lamar Arrington, Meridian, was recently appointed superintendent of Matty Hersee Hospital. He has named Dr. C. J. Lewis, Meridian, assistant superintendent; Mrs. Evans Bozeman, secretary; Dr. R. L. Donald, resident physician, Miss Ursula McGovern, superintendent of nurses; and Miss Marie Irby, laboratory technician. The new board of trustees of the hospital appointed by the Governor is as follows: C. L. Gray, Meridian, President; Mrs. E. A. Eastburn, Meridian, Secretary; M. F. Case, Quitman; Sam G. Creekmore, DeKalb; and Mr. Floyd Loper, Lake.

The visiting staff will be announced later.

MADISON COUNTY.

I have been very negligent in writing to you each month as I should, but I'll try to do better from now on. There are just a few items to report this time, and I hope to find more from time to time.

Dr. John B. Howell has been appointed as a member of the board of trustees of the state charity hospital at Jackson.

Mrs. C. F. Smith, mother of Dr. Robert W. Smith, Canton, has been seriously ill, but we are hoping to hear that she is much improved.

Dr. John B. Howell, Canton, attended the meeting of the American Medical Association in New Orleans for a day or so last month.

Miss Fannie Mae Stevens, efficient nurse at the King's Daughters' Hospital has gone to her home, Noxapater. She has been replaced on the nursing staff by Miss Leddy a graduate of St. Joseph's Hospital, Memphis, Tennessee.

I'll try to be back with you again next month.

A. P. Durfey, County Editor.

Canton, June 9, 1932.

GRENADA COUNTY.

Your letters have been received and I will answer them all by saying you must not know how many "harrassments" some fellows can have. It seems like I have more things to keep me busy with the other things than anybody.

I appreciate your patience and will try and reward it by doing better in the future.

Medical affairs in our county are nearly at a standstill. There is little or no sickness and the doctors, so inclined, have plenty of leisure time to visit the lakes and beguile the finny tribe.

An occasional case of surgery and obstetrics alone keeps us on the "job."

There have been no marriages, births, removals or other changes locally. Our sympathy goes out to our beloved co-worker, Dr. J. K. Avent, in the death of his mother which occurred at home at Oxford the fourth inst.

Our highly esteemed veteran doctor and nestor of medicine, Dr. J. W. Young, is in his accustomed health but unable to go about. Thanks for the splendid picture and sketch of him in the current Journal.

I hope to be on the roll next month.

T. J. Brown, County Editor.

Grenada, June 9, 1932.

ISSAQUENA COUNTY.

Issaquena has just wound up another whirlwind political campaign, hotter even if possible, than the one preceding last fall's general election. This time the contest was for a member to our Mississippi River Levee Board. Two of our three doctors, being members of the county Board of

Supervisors, and prominent politicians, were on different sides, and arrayed against each other. The contest waged hot and furious, and necessarily one of us had to suffer bitter defeat. But our Issaquena doctors do not harbor malice. We have shaken hands across the "bloody chasm" and together attended a tax-payers' convention of the Delta Counties in Greenville where we worked shoulder to shou'lder for the good of our county and the people of the entire Delta. Our doctors do not hesitate to stand up in the open and fight for their convictions, but when defeated we take it like men.

W. H. Scudder, County Editor.

Mayersville, June 10, 1932.

NORTHEAST MISSISSIPPI THIRTEEN COUNTIES MEDICAL SOCIETY.

The regular quarterly meeting of the Northeast Mississippi Thirteen Counties Medical Society was held at the city hall, Amory, on Tuesday, June 21, at 2 p. m. The program as announced by Dr. J. M. Acker, Jr., Secretary, was as follows:

1. Meeting called to order by Dr. W. C. Spencer, President.
2. Invocation.—Rev. J. F. Measell.
3. Diarrhea of Infants and Children.—Dr. J. F. Eckford.
Discussion opened by Drs. Hood and Reed.
4. Abscess of the Liver.—Dr. R. H. Christian.
Discussion opened by Drs. L. C. Feemster, Jr., and R. P. Donaldson.
5. The Value of the Sex Hormone Test In Gynecology.—Dr. W. T. Black, Memphis, Tennessee.
6. Radium Therapy with Report of a few Cases.—Dr. W. H. Anderson.
Discussion opened by Drs. J. R. Williams and M. Q. Ewing.
7. Business session.
8. Banquet, 7:30 p. m., at City Hall.

COMMITTEE ON COMMUNITY HOSPITALS.

A meeting of the Committee of the Mississippi State Medical Association on Community Hospitals was held at the Robert E. Lee Hotel, Jackson, on Friday, June 10, at 2 p. m. with an excellent attendance. Dr. E. R. Nobles, Rosedale, Chairman, presided. The committee to inspect hospitals receiving state aid in accordance with the new law, was announced as follows:

By Dr. J. M. Acker, Jr., President of the Mississippi State Hospital Association.—Dr. C. M. Speck, New Albany.

By Dr. J. Gould Gardner, President of the Mississippi State Hospital Association.—Hamilton Crawford, Hattiesburg.

By Miss Mary D. Osborne, President of Mississippi State Nurses Association.—Miss M. E. Dorsey, Greenville.

It is the duty of this committee to inspect and pass upon the equipment, facilities, and abilities of hospitals receiving state aid to care for charity patients.

Dr. Gardner is sending an explanatory letter to all hospitals of the state.

WINONA DISTRICT MEDICAL SOCIETY.

The Winona District Medical Society met at Ackerman, Tuesday, June 14, at 1:30 p. m., with 25 members and 10 visitors present. The program included:

1. Allergy.—Dr. G. E. Adkins, Jackson.

Discussion opened by Drs. R. A. Clanton and C. A. Pender.

2. Diagnosis and Treatment of Seasonal Hay Fever.—Dr. A. H. Little, Oxford.

Discussion opened by Drs. S. S. Caruthers and R. M. Stephenson.

3. Diagnosis of Certain Diseases of the Meninges and Nervous System.—Dr. P. B. Brumby, Lexington.

Discussion opened by Drs. J. O. Ringold and R. C. Elmore.

4. Case Reports.—Members of the Society.

5. Luncheon at the Baptist Church.

We were very glad to have Dr. J. M. Acker, Jr., President of the Mississippi State Medical Association, with us.

E. W. Holmes, Secretary.

TRI-COUNTY MEDICAL SOCIETY.

A meeting of the Tri-County Medical Society was held on June 14 at Tylertown. The program included the following:

Dinner, 12:30 p. m.

Hydrocele.—Dr. A. B. Harvey.

Intestinal Infections of Children.—Dr. R. E. Sylverstein.

Tularemia.—Dr. B. L. Crawford.

Common Throat Infections.—Dr. H. R. Fairfax.

Dr. W. P. Tucker, who has recently located in Brookhaven, was elected a member of our local medical society. He was connected with the Kentucky State Health Department before coming to Brookhaven.

H. R. Fairfax, Secretary.

Brookhaven, June 16, 1932.

WOMEN'S AUXILIARY TO THE MISSISSIPPI STATE MEDICAL ASSOCIATION.

Mrs. W. C. Pool was born at Ocean Springs, R. F. D., Mississippi. She received her early education from a governess, graduated from high school at Poplarville and attended Whitworth College, where she did special work in voice.



MRS. W. C. POOL

Cary, Mississippi

President of Women's Auxiliary to the Mississippi State Medical Association

After leaving Whitworth, she continued voice and taught voice and choral.

Mrs. Pool is a member of the old pioneer Ramsay family of south Mississippi. She married Dr. W. C. Pool, Cary, on May 29, 1917.

Mrs. Pool is a member of several clubs and has always taken an active part in these organizations. At present she is President of the Women's Auxiliary to the Issaquena-Sharkey-Warren Counties Medical Society as well as president of the State Auxiliary.

FROM THE PRESIDENT OF THE WOMEN'S AUXILIARY.

Dear Auxiliary Members:

The greatest surprise and honor that I have ever experienced was when you offered me the presidency of the Women's Auxiliary to the Mississippi State Medical Association, at the annual meeting held in Jackson, April 11-13, 1932.

The Editor has been so kind and thoughtful to ask for a message and I am grateful to him for this opportunity to thank you for the privilege of trying to serve you and to ask for your full cooperation in the work.

My plans are still in the making, but I expect at an early date to be able to mail each Auxiliary

a complete outline, which I hope will prove to be helpful.

The purpose of our Auxiliary is to extend the aims of the medical profession, through the wives of the doctors, to the various women's organizations which look to advancement in health and education; to assist in entertainment at state, district and county society meetings; to promote acquaintance among doctors' families that local unity and harmony may be increased.

The Auxiliary should be all that its name implies, an aid—a reserve force—an Auxiliary organized for the purpose of responding to any call from the medical profession.

Scientific medicine needs the co-operative aid which can come through such auxiliaries. Whatever makes for better understanding among doctors and their families makes for better organization.

The associations and friendships will more than repay me for any service I may give in an effort to promote the objects of the Women's Auxiliary, which is still in its youth. Its growth is slow but we believe it is sure and will be permanent. This, however, will be determined by the service we render. I feel that the wives of the doctors of Mississippi are interested and that our organization will become more perfected and membership increased.

The only way to win a place for the Auxiliary is to make it so good that the medical societies will feel that they cannot get on without it. This means a study of local conditions, particularly with reference to the views of the medical society, and a program wisely planned and tactfully executed.

Where the Auxiliaries have a definite program, meet regularly, you find a fine spirit of service and fellowship.

I am finding the doctors very appreciative of the value of the Auxiliary, willing to co-operate and advise with us at any time.

I am very grateful to Dr. Acker, president of the Mississippi State Medical Association, for his encouragement and offer to help us in any way he can. I am sure Dr. Acker will be splendid assistance to us in many ways.

My desire is that the Women's Auxiliary to the Mississippi State Medical Association in the year 1932-1933 will have an increased membership, and every district an auxiliary. This goal now seems a long way up the hill, but with such aims as the Auxiliary to inspire us I feel sure the doctors' wives of the State of Mississippi will respond and we will be able to develop an Auxiliary that our doctors will look upon with pride.

Again I ask the co-operation of each doctor's wife, whether she be a member of an auxiliary or not, but I suggest that you join an auxiliary if there is one in your territory, if not one, organize if possible or become a member-at-large. We that

are members need you to help us to carry forward the auxiliary movement in a helpful and constructive way.

I wish more than anything else that our year together may mean something more than a mere tryst at the "Wishing Well."

Mrs. W. C. Pool.

Cary, June 1, 1932.

WOMEN'S AUXILIARY EXECUTIVE BOARD.

The executive board of the Women's Auxiliary to the Mississippi State Medical Association held its ninth annual meeting at the Robert E. Lee Hotel in Jackson, June 8.

The meeting was called to order promptly at eleven o'clock by Mrs. W. C. Pool, Cary, President, with nine members present. The minutes of the last board meeting and of the general meeting held in April were read; the revision of the constitution and by-laws was approved and adopted; plans were discussed in regard to increasing the membership; and the suggestion of Dr. J. M. Acker, Jr., president of the Mississippi State Medical Association, that the dues for the auxiliary members be paid by the doctors to their secretaries then in turn to be sent on to the treasurer of the State Auxiliary, was adopted for the members-at-large.

Mrs. D. J. Williams, Gulfport, was appointed chairman of the committee on the Preventorium Fund at the request of Mrs. Henry Boswell Sanatorium, who is working on this committee with Mrs. Williams.

Mrs. J. A. K. Birchett, Jr., who is councilor for the fifth district, has distinguished herself by winning two silver trophies, one in the Delta golf tournament held in Greenville, and one in the Trans-Mississippi golf tournament held in Hot Springs, Ark., in June.

Mrs. Leon S. Lippincott.

HISTORY OF THE WORK OF THE STATE MEDICAL ASSOCIATION FOR THE PREVENTORIUM.

At the Vicksburg meeting of the State Medical Auxiliary, May 14, 1930, Dr. Henry Boswell addressed the convention on the work of the preventorium, showing the great possibilities of this work among under-privileged children, and soliciting the aid of the doctors' wives in popularizing this work and helping in other special ways, such as looking after children who have been returned to their homes, seeing that those children who need this care most are brought to the attention of the proper authorities and supplying certain needs are not provided for in the general state appropriation.

The president, Mrs. M. H. Bell, then called for discussion after which the convention voted to make the preventorium work the principal work

of the organization for the next year. It has continued to be the principal work of the Auxiliary up to the present time. Mrs. Bell appointed as state chairman for this important task, a woman well qualified in every way to handle it, Mrs. D. J. Williams, of Gulfport.

The new state president, Mrs. L. L. Polk, called a Board meeting at the preventorium at Sanatorium in July, 1930. This meeting was well attended and enjoyed a luncheon served by the preventorium staff in their own dining-room. After interesting discussions of the needs of the preventorium by Dr. Boswell and Mrs. Sue Stewart Brame, the Board decided on collecting a fund for the institution to be kept as a separate and special fund to be used as needed.

Following this meeting, Mrs. Williams sent out personal letters to all women's clubs in the state, soliciting their interest in this great work. By the next convention of the Auxiliary in the following May, 1931, in Jackson, she reported the collection of \$227.25 from 71 organizations. Mrs. Williams was reappointed chairman of this work for the ensuing year, and up to the present time, June 1, 1932, she has sent in to this fund the amount of \$125.65. We are very proud of this showing at the present time. This fund is kept separately and is being used as needed for library books, song books, supplies for special occasions, such as Easter, Thanksgiving, May Day, replacement of wornout toys, playground equipment, and other emergency needs.

We would be glad if everyone in the state could come to the preventorium to see what is being done there; for only by seeing the home in operation can one fully realize what this means to our beloved state. Fifty happy children are building back to normal health, learning how to live in a sane, wholesome, normal way, imbibing ideas of fair play, unselfishness, honor, and usefulness, that will surely bear fruit later in their home life and communities.

Mrs. Henry Boswell,
Sanatorium.

LET'S PUSH ORGANIZATION.

When we look back ten years and recall how many husbands reluctantly put on their Sunday suit and stiff collar to beat it to their State Medical Association meetings alone, because wife insisted it was the only thing to do, and in a short decade these same husbands becoming enthusiastic attenders because wife has a common interest in going along—why question the feasibility of a Medical Auxiliary?

In the eight years since the Women's Auxiliary to the Mississippi State Medical Association was founded, we have yet the first time to hear any thing unpleasant coming before the body or having had to be settled out of session.

We organized with "harmony" as the key word and the same atmosphere prevails today. The wives of physicians, as a whole, rate high intellectually, making the aims of the organization appeal to them—hence the above mentioned "harmony."

While we are not as large in point of membership as we should be, we may well be proud of achievements which could not have been accomplished without an organization. I refer first of all to the work given us by the State Medical Association on flood sufferers' relief and following this, the health education promoted by this body—through our own and other women's organizations, and the preventorium work, which has been invaluable in a small way.

Wherever the State Association meets, and a local Auxiliary is on the job, you may always rest assured the meeting from both attendance and social standpoints, will be a success. The splendid meeting of the Auxiliary to the American Medical Association held in New Orleans last month is a concrete example of what an organized thoroughgoing group of doctors' wives may do. We were proud of them and here is our salute.

Knowing Mississippi as we do, we realize that organization has been retarded largely because of the scattered medical societies, some embracing as many as seventeen or more counties, thereby giving wives the impression that a central organization within their husbands' society was impractical. This may be overcome by forming county units within an auxiliary, giving them shorter distances and more intimate contact—which is absolutely necessary if we carry out the aims—that of creating friendliness among doctors' families.

Our husbands are no longer afraid of the motives behind our desire to be an aid in the true sense of the word, and are lending valuable advice as well as taking some. The time is now ripe in Mississippi, with Dr. Acker heading the State Medical Association, and Mrs. Pool heading the State Auxiliary for intensive organization. "Let's go to it."

Mrs. Dan J. Williams,
Gulfport

WOMEN'S AUXILIARY TO THE ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL ASSOCIATION.

The regular monthly meeting of the Auxiliary was held at the Vicksburg Hotel on May 17, with sixteen members present. Mrs. F. L. Van Alstine, Jackson, and Mrs. A. G. Wilde, Jackson, were special guests.

After a delicious dinner, Mrs. W. H. Parsons, Vicksburg, gave a piano solo. Mrs. W. C. Pool, president of the Women's Auxiliary to the Mississippi State Medical Association and president of this Auxiliary, presented Mrs. Van Alstine and

Mrs. Wilde, president-elect and secretary, respectively, of the Auxiliary to the Mississippi State Medical Association. The minutes of the last meeting were read and approved.

Mrs. Sidney W. Johnston gave a reading, "The Truthful Doctor," which was cleverly rendered and thoroughly enjoyed.

It was unanimously resolved that a letter be sent to Mrs. M. H. Bell, expressing regret at her absence and hoping Doctor Bell would be much benefited by his trip to Johns Hopkins Hospital.

Regret was expressed at the absence of Mesdames Birchett, who were prevented from attending by the extreme illness of the mother of Dr. J. A. K. Birchett, Sr.

Mrs. H. S. Goodman, Cary, reported intending having a drive for "Hygeia" in Sharkey County during August.

Mrs. H. H. Haralson, Vicksburg, chairman of the tuberculosis committee, reported that patients who could not get into the sanatorium were being fed. She also stated that she had not put on a Child Health program as she was unable to get information as to what was wished.

Mrs. E. F. Howard, Vicksburg, chairman for nurses, reported it was not practicable to do much in the way of entertainment during the season for lectures. She recommended that an assessment of one dollar per member be made to defray the expenses of an entertainment to be given during vacation. This was approved.

Mrs. P. S. Herring Vicksburg, Treasurer, reported: Checking account, \$17.83; savings 76 cents; total \$18.59.

Mrs. L. S. Lippincott, Vicksburg, gave a report of the meeting of the Auxiliary to the American Medical Association in New Orleans.

Mrs. A. Street, Vicksburg, chairman for the year book, reported a tentative program as follows:

September: Social meeting with doctors at Country Club—Mrs. Edley Jones, Vicksburg, Chairman.

October: Hygeia—Mrs. L. S. Lippincott, Vicksburg, Chairman.

November: Tuberculosis—Mrs. M. H. Bell, Vicksburg, Chairman. Discussion of plans for seal sales. Appointment of nominating committee.

December: Visiting Doctors—Mrs. W. C. Pool, Cary, President, presiding. Election of officers. Reports of meeting of Auxiliary to Southern Medical Association at Birmingham.

January: Address—Dr. F. J. Underwood, Jackson, subject: "Public Health." New president presiding.

February: Medical History. Jane Todd Crawford Memorial—Mrs. J. A. K. Birchett, Vicksburg, Chairman.

April: Historical Program, subject to be chosen by leader, Mrs. B. B. Martin, Vicksburg.

May: Child Health Program—Mrs. H. H. Haralson, Vicksburg, Chairman.

The Committee on Year Book consists of Mrs. A. Street, Chairman; Mrs. W. C. Pool, Mrs. M. H. Bell, and Mrs. S. W. Johnston.

The meeting adjourned to meet the second Tuesday in September.

E. F. Howard,
Acting Secretary.

EIGHTH COUNCILOR DISTRICT WOMEN'S AUXILIARY

Work is going right along in this District to retain and increase membership. Natchez organized the Homochitto Valley Auxiliary last fall in October and still is very active.

The ladies from Natchez expect to go over to Brookhaven in the near future and meet with the ladies of the Tri-County Auxiliary and stimulate more interest.

We will also go into the Pike County territory and expect to get things going over there.

The Eighth District is endeavoring to move forward all the time.

Mrs. Lucien S. Gaudet.

Natchez,
June 9, 1932.

WOMEN'S AUXILIARY TO THE HARRISON- STONE-HANCOCK COUNTIES MEDICAL SOCIETY

The Women's Auxiliary to the Harrison-Stone-Hancock Counties Medical Society met Wednesday afternoon, June 1, at the home of Mrs. George Melvin, president, on the Veterans' Hospital grounds. The organization voted to continue active work through the summer.

A committee composed of Mrs. C. A. McWilliams, Mrs. E. C. Parker, and Mrs. D. J. Williams, was named to confer with the officials of the King's Daughters' Hospital at Gulfport, relative to the needs of the hospital and to report to the Auxiliary at the next meeting with the idea that the auxiliary may render some service to this institution.

At the close of the business session, the hostess served tea. Mrs. D. J. Williams presided at the table.

Those present were Mesdames D. J. Williams, D. G. Rafferty, E. C. Parker, W. W. Cox, C. A. McWilliams, J. A. McDevitt, J. S. Laird, Elmer D. Gay, A. L. Roberts, C. G. Beckett, Williams Manney, Dr. Emma Gay, and Miss Willa Files.

A special meeting of the Auxiliary will be held at the home of Mrs. C. A. McWilliams on July 6.

GULF COAST ENTERTAINMENTS

A drive from Pass Christian to Biloxi and Gulf Hills, a visit to Pass Christian Gardens, a luncheon at the Great Southern Hotel, souvenir gifts at the city hospital, Biloxi, and a tea at the Veter-

ans' Hospital, Gulfport, featured the visit to the coast of eighty members of the American Medical Association and Women's Auxiliary to the American Medical Association during the annual meeting of the American Medical Association in New Orleans. About twenty members of the Auxiliary to the Harrison-Stone-Hancock Counties Medical Society and members of the society met the visitors at the station in Pass Christian and accompanied them for the entire day's outing.

At the home of Dr. and Mrs. D. G. Rafferty, Pass Christian, the visitors were entertained in the garden where they were served refreshments and Dr. Rafferty presented each of the ladies with a corsage of spring flowers. Visits were made to the Simmons and Hecht Gardens and the Inn-By-The-Sea.

At Long Beach a stop was made at the Municipal Rose Garden where a committee presented everyone with roses.

At the luncheon at the Great Southern Hotel, Gulfport, Mrs. Daniel J. Williams, past president of the Women's Auxiliary to the Southern Medical Association, past president of the Women's Auxiliary to the Mississippi State Medical Association and past president of the Women's Auxiliary to the Harrison-Stone-Hancock Counties Medical Society, presided as toastmistress.

Mayor Jos. W. Milner, Gulfport, gave the address of welcome on behalf of the city. E. J. Adams, Sr., Pass Christian, president of the board of supervisors, gave the welcome on behalf of Harrison County. Dr. C. M. Shipp, Bay St. Louis, president of the Harrison-Stone-Hancock Counties Medical Society, introduced Carl Marshall, Bay St. Louis, who was the speaker of the occasion.

After the drive over the bridge to Ocean Springs and Gulf Hills the tour returned to the Veterans' Hospital, Gulfport, where the Medical Auxiliary entertained at tea, at the nurses' hut. Mrs. George Melvin, president of the Women's Auxiliary to the Harrison-Stone-Hancock Counties Medical Society, was official hostess, assisted by almost the entire membership of the auxiliary.

At Biloxi the party was greeted by Mrs. B. Z. Welch and Mrs. A. P. Stewart, each lady being presented with a pecan praline. The visitors were shown over the Biloxi hospital by a group of graduate nurses.

The party entrained for New Orleans at 6:15 P. M.

Prominent among the visitors were Mrs. Walter Jackson Freeman, Philadelphia, Penn., incoming president of the Women's Auxiliary to the American Medical Association; Mrs. Charles Oates, Little Rock, Arkansas, president of the Women's Auxiliary to the Southern Medical Association; and Mrs. A. B. McGlothlin, St. Joseph, Missouri,

outgoing president of the Women's Auxiliary to the American Medical Association. These three ladies were house guests for several days of Mrs. D. J. Williams at Long Beach.

HONOR ROLL

Our Journal this month contains news of six hospitals, nine county societies, three women's auxiliaries in addition to news of the state auxiliary, items from eighteen county editors, and a number of letters and messages from officers and members. Picking up!

The following are the contributors: J. M. Ack-er, Jr.; E. F. Howard, J. S. Ullman, I. E. Stennis, J. James, W. L. Little, M. L. Flynt, S. B. McIlwain, T. Paul Haney, Jr., C. M. Shipp, S. E. Field, M. L. Montgomery, Lon W. Dotson, W. B. Dickins, R. P. Donaldson, E. M. Murphey, C. W. Patterson, W. C. Pool, G. S. Bryan, A. H. Little, L. Wallin, T. L. Bennett, George F. Carroll, F. M. Acree, G. Lamar Arrington, A. P. Durfey, T. J. Brown, W. H. Scudder, H. R. Fairfax, M. W. Robertson, E. W. Holmes, A. G. Payne, J. A. Beck, L. W. Long, G. C. Jarratt, Mrs. W. C. Pool, Mrs. Leon S. Lippincott, Mrs. Henry Boswell, Mrs. Dan J. Williams, Mrs. E. F. Howard, Mrs. Lucien Gaudet—41.

THANK YOU. Let us hear from you again next month.

CENTRAL MEDICAL SOCIETY

Following is the notice of the June meeting of the Central Medical Society, sent out by Dr. Robin Harris, Secretary:

PLACE: Edwards Hotel, Jackson.

DATE: Tuesday, June 21, 1932.

HOOR: 7:30 P. M.

Scientific Program

1. Foreign Body in the Lung.—Dr. H. F. Garrison, Jackson.

2. Foreign Body in the Lung.—Dr. J. C. Walker, Jackson.

3. Some Observations of Foreign Bodies in the Intestinal Tract, with Report of One Case.—Dr. L. W. Long, Jackson.

Discussion of the above three papers will be opened by Dr. John Darrington, Yazoo City, and Dr. N. C. Womack, Jackson.

4. Sarcoma of the Pancreas.—Dr. W. F. Hand, Jackson.

Discussion will be opened by Dr. A. E. Gordin, Jackson, and Dr. J. F. Armstrong, Jackson.

5. Twenty Minutes on the China Situation.—Dr. Price, Jackson. The first three papers will consume a maximum of twenty minutes.

If every member will pay his duties we will have enough money to buy a supper for the next meeting.

BOOK REVIEWS

Electrotherapy and the Elements of Light Therapy: By Richard Kovacs, M. D. Philadelphia, Lea & Febiger. 1932. pp. 528, illustrated with 211 engravings.

The reviewer has had the opportunity of spending a number of pleasant hours with the author in his office and in the hospital departments of physical therapy which he directs. The book is the work of a teacher of physical therapy and a modern student of the therapeutic application of electricity. It begins with a consideration of electrophysics and leads up to a discussion of the apparatus which produces the various electrophysical agents. Instruction in the technic of application, the indications and the contraindications to the use of these agents are given.

Worthy of special commendation are the chapters on Electrodagnosis, Theory and Technique and Electrodagnosis in Pathological Conditions. These constitute the best discussion of the subject in any book on physical therapy published up to the present time. The motor point charts are well drawn, making it easy to locate a given motor point. The tables accompanying these drawings give the actions of the various muscles and their degree of electrical excitability, making electrodiagnosis all the more intelligible.

Part III consists of "Elements of Light Therapy" and gives more light about therapeutic light. Attention is called to accidental injuries in phototherapy and to the dangers of unsupervised use of such a potent agent.

Part IV is devoted to "Applied Electrotherapy" in which the author is well versed by virtue of his large clinical experience. However, authoritative opinions and methods of other experts are also given. For instance, the chapters on Electrotherapy in Dermatology and Electrotherapy in Diseases of the Ear, Nose, and Throat are by J. J. Eller and Wallace Morrison, respectively. The concluding chapter has to do with physical therapy in institutional practice and has a number of valuable suggestions as to organization, personnel and equipment.

The book is written not only for the specialist in electrotherapy but endeavors also to show how "With a comparatively inexpensive equipment, the general practitioner can produce therapeutic results in many conditions in which treatment by medication or surgery alone is not quite satisfactory."

NATHAN H. POLMER, M. D.

Reconstruction of the Biliary Tract: By Edmund Horgan, M. D., M. S. (in Surgery), F. A. C. S. New York, The MacMillan Co. 1932. pp. 201.

This monograph briefly reviews and evaluates all of the reconstructive operations upon the biliary tract. All cases recorded in the literature

from the first one of von Winiwarter, in 1880, down to the present day are discussed. Unfortunately, as the author emphasizes, the subsequent history of many patients was not reported. Nevertheless, the work is of interest and value, especially to those interested in the technic and rather slow evolution of reconstructive surgery of the biliary tract.

AMOS M. GRAVES, M. D.

Nutritious Service in the Field; Child Health Center: By the White House Conference on Child Health and Protection. New York, The Century Co. 1932. pp. 139 + 57. Price, \$2.00.

Conclusions and recommendations of two subcommittees, the Committee on Medical Care for Children, and of the White House Conference on Child Health and Protection, are incorporated in this attractively bound volume.

A careful perusal of the contents serve to prove with what deliberation and completeness these committees have functioned.

Section 1 has a superb introduction and an outstanding dissertation on the Nutritionist, as well as the "Other Groups Interested." These reports are replete with data and detail, warranting "The Challenge." The Summary deals with necessary recommendations, and the appendix, amply describes specific examples of Nutritional Service with recommendations.

"For every child health protection from birth through adolescence . . . the insuring of pure food, pure milk, and pure water."

In Section II, Child Health Centers: A Survey, are included, both Continental United States and most of her insular possessions, Alaska, Philippine Islands, Hawaiian Islands, and Porto Rico. Statistics and forms are used, and constitute a large part of this interesting section.

One can gain valuable information from this volume as a whole, especially that part which relates to the Nutritionist. Super-education, however, of the dietitian may lead to personal idiosyncrasies, and, therefore, it would seem appropriate that those who are to stimulate the need of proper food, both in animal husbandry and in the human being, should look to the veterinarian in the former, and to a trained pediatrician in the latter, for their counsel and advice.

"For every child . . . promotion of health, including health instruction and a health program . . ."

CHARLES JAMES BLOOM, M. D.

Gynecology for Nurses: By Philip J. Reel, M. D., F. A. C. S. Philadelphia, F. A. Davis Co. 1932. pp. 282.

The work by Reel is well written, well illustrated and complete. It is especially valuable for

supervisors and for nurses interested in doing special gynecological work. The chapters dealing with the examination of the patient, pre-operative preparation, postoperative management and complications are ably handled. An unusual feature of the book is the inclusion of a concise consideration of the metabolism test, the kidney function test, the Aschheim-Zondek test for pregnancy, the Rubin test and uterosalpingography. The uses of diathermy, light therapy, antitoxins and vaccines are mentioned under treatment. Each chapter is followed by a complete list of review questions which are valuable for teaching purposes.

JOHN T. SANDERS, M. D.

The Expectant Mothers' Handbook: By Frederick C. Irving, M. D. Boston, Houghton, Mifflin Company. 1932. pp. 203. Price, \$1.75.

The many questions the obstetrician is forced to answer is the origin of this excellent little book by Frederick C. Irving, Professor of Obstetrics at Harvard University Medical School. The young pregnant woman learns of childbirth from her friends who tend to exercise their amateur dramatic talents rather than their purely expository abilities, and as a result she is filled with a vast amount of misinformation. The intelligent woman is usually justly curious about herself and the interesting process she is undergoing and the somewhat painful and often dangerous episode which terminates it. It is the attending physician who must answer her questions. Years of experience has led Dr. Irving to compile this little treatise for the layman explaining simply and yet accurately what the pregnant woman wants to know.

The anatomy and physiology of the female generative tract and the matter of fertilization are well described with excellent drawings. Authoritative chapters on the course of pregnancy, the growth of the fetus, the diagnosis of pregnancy (including even the recent biological tests which seem to be familiar to the lay public) follow. Sections on the hygiene of pregnancy, the diet, and the care of minor complications should supplement adequately the directions which any physician might give. The danger signals of pregnancy, on the other hand, are handled in far too short a space in comparison with their value and their importance in the light of the recent propaganda for pre-natal care.

Of great importance is the description of labor. It is a satisfaction to note that Dr. Irving has cleared up many misconceptions, for example, stressing the fact that a dry labor is not any longer than the usual one provided there is no underlying pathology, or again that the older primipara need not necessarily have a more difficult labor than her younger sister. Perhaps some objection may be taken to the chapters on analgesia, always the most difficult thing to handle in a book of this sort. Dr. Irving writes from his

wide experience with various anesthetics, but it might have been wiser to have withheld a comparative comment.

The educated woman will be particularly interested in the delightful explanation of the biological aspects of pregnancy by Professor George H. Parker of the Department of Zoology at Harvard. In simple language the facts of evolution have been collected their relation to pregnancy discussed.

The book is well worth recommending to one's private patients for instruction and for information that will remove the fear of the unknown that makes pregnancy so difficult for the young woman.

ARTHUR G. KING, M. D.

Fighting Disease with Drugs: Ed. by John C. Krantz, Jr. Baltimore, Williams & Wilkins Co. 1931. Illus., pp. 230.

A symposium dedicated to the story of pharmacy, its evolution and its relationship to health, pain and suffering. A chapter is devoted to the business side of the profession with an outlook for the future.

I. L. ROBBINS, M. D.

Microscopic Slide Precipitation Tests for the Diagnosis and Exclusion of Syphilis: By B. S. Kline, A. B., M. D. Baltimore, Williams and Wilkins. 1932. pp. 99.

This volume represents a worth while supplement to Kahn's book on precipitin tests.

F. M. JOHNS, M. D.

PUBLICATIONS RECEIVED.

P. Blakiston's Son & Co., Inc., Philadelphia: *Physiology of Bacteria*, by Otto Rahn. Recent *Advances in Pathology*, by Geoffrey Hadfield, M. D., F. R. C. P., and Lawrence P. Garrod, M. A., M. B., B. Ch., M. R. C. P. *Clinical Interpretation of Laboratory Reports*, by Albert S. Welch, A. B., M. D.

Paul B. Hoeber, Inc., New York: *Principles of Preoperative and Postoperative Treatment*, by Reginald Alex Cutting, M. D., C. M., M. A., Ph. D. *Medicine Among the American Indians*, by Eric Stone, M. D.

The University of Chicago Press, Chicago: *The Costs of Medicines*, by C. Rufus Rorem, Ph. D., C. P. A., and Robert P. Fischelis, B. S., Ph. D. *The Healing Cults*, by Louis S. Reed, Ph. D.

Houghton, Mifflin Company, Boston: *The Expectant Mother's Handbook*, by Frederick C. Irving, A. B., M. D.

Wilhelm Maudrich, Vienna: *Plastic Surgery of the Nose, Ear and Face*, by Dr. Victor Fruhwald, translated by Geoffrey Morey, M. B., B. S., D. L. O. Jas. A. DeMoss, Trayer: *Medics, or the Glory of Man*.

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and

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No. 2

THE INTERNE YEAR.*

C. JEFF MILLER, M. D.

NEW ORLEANS.

I find myself tonight, if I may compare small things with great, in the position of Sir James Barrie and the shadowy McConnachie, that *alter ego* of his who, so he would have us believe, is forever luring him from the straight highway of literary endeavor into winding bypaths which he would not otherwise be following. This is my plight: I had proposed to myself to speak to you, in response to the gracious invitation of your Dean, on the changing relations of doctor and public, a subject which cannot fail to be of serious concern to every medical man today, and one upon which, I fondly imagined, I could be rather eloquent. But the McConnachie at my elbow thought otherwise. I struggled for a long time with my chosen theme, then I perforce let him have his way, and I am not so sure that his wisdom is not greater than mine.

For while I shall speak to you in a very simple way, I am afraid, and of very simple matters, they are, none the less, very important matters. I shall forget, as it is very easy for me to forget, that I am anything but a physician and a rather old-fashioned one at that. I shall speak to you as a teacher who has taught medical students for more than thirty years, who understands their problems and their difficulties, and who confesses that he views with a degree of apprehension and misgiving many of the pres-

ent tendencies in medical education. In short, I intend to speak to you of the ultimate aim of your years of training in this great institution, and of the way in which you can best immediately set about fulfilling the purpose of your education.

It would not have been necessary for a commencement orator of my generation to say the things to a class of medical students on the night of their graduation that I shall say to you. Judged by modern notions, I have no doubt that we were a rather badly prepared group. Our formal didactic teaching was inconsiderable. Of scientific training in the modern sense we had none. Our laboratories were ridiculously inadequate when compared with modern facilities. But in one way, at least, we had a distinct advantage over even the most highly trained of modern students: we had learned the principles of our art by the study of disease where it can be most profitably studied, in the human subject. We had spent little time in the laboratory but much time in the hospital ward. We had had little to do with experimental medicine, but a great deal to do with clinical medicine. We ignored mice and concentrated on men. Everything that we did was done, as Harvey Cushing puts it, in terms of the future patient rather than of the present frog. And so we comprehended, as I venture to say many of you gentlemen do not comprehend, the real purpose of our education: we knew, whatever else we did not know, that our chief function was the healing of the sick.

For the function of the medical school, though it is a function that many medical schools of this day are in grave danger of

*Read at the Commencement of the Medical School of the University of Georgia, June, 1931.

forgetting, is first of all and above all the training of physicians to minister to the sick. It is beyond doubt an excellent thing for medical students to be trained, as modern medical students are trained, in the fundamentals of medical science, but it is a most regrettable thing for medical students not to realize, as many modern medical students do not, that when one comes to grips with reality, it is the art of medicine rather than the science of medicine which stands one in the greatest stead.

The emphasis of modern medical training is too often put on the wrong thing. Acquaintance with the patient, as Chipman puts it, is the most important introduction of one's medical life, and the great weakness of medical education today is that contact with patients during the undergraduate years is extremely brief. The medical faculty would do well to recollect once more the epitaph which Sir William Osler said he wished written on his tombstone, "He taught medical students in the wards." Today they are being taught in the laboratory, and that is not the place to teach clinical medicine.

No matter what branch of medicine you may wish to follow, you students who are graduating tonight, your concern must ever be with ailing mortals. Do you know these sick men and women now other than as symptom complexes or interesting cases, as illustrations of special diseases, as surgical or medical exhibits? I fear not. Do you know them as John Smith and Mary Jones? I doubt it. Do you know them as human beings whose happiness and usefulness, whose very lives, depend upon what medical science and medical art, as exemplified and personified in your own person, can do for them? It would be surprising if you did. For the modern medical student is turned out upon the world excellently versed in the science of medicine, rather less well trained in the therapeutics of medicine, and totally ignorant of the humanities of medicine, of the treatment of patients as anything but cases to be fitted into specific pathologic categories and to be handled in them by rule of thumb.

But medicine cannot be practiced in that fashion, gentlemen. You will never be successful practitioners of the art of Hippocrates if you hold to that conception of your calling. The healing of the sick has been the sole purpose of your medical training, and anything that you may elect to do in the future must take its departure from that point. Be as scientific as you please, your patients will be the better for it, but in the crises of life which you must face daily in the profession you have chosen to follow, science alone will not serve your need. It must be mingled with the art of medicine and sweetened with the milk of human kindness which that wise old philosopher, Stephen Paget, urged every physician to leave behind him in the sickroom "for gossip to lap."

My first advice to you, therefore, would be that you begin at once to develop the contact with patients which has been all too slight in your undergraduate years. Theoretically, I am sure, everyone of you realizes the necessity and the value of the internship which you are about to undertake, and yet, from what I have been used to seeing in the generations of internes who have gone before you, I greatly fear that many of you will let slip its tremendous opportunities. I have lived through many of these generations. There are a vast number of internes whom I cannot recall because of their essential mediocrity—they blew neither hot nor cold—but there are two varieties I cannot possibly forget. The first type is represented by the man who is outstanding because of his excellence. He has a background of information, he is interested in what he is doing, he is reliable in his performance and serious in his purpose, he does equally well his minor duties and his major tasks, and I leave my patients in his care as willingly as I would leave them in the care of my very competent assistants. The second type is likewise outstanding, but for a very different set of reasons, his utter worthlessness, his complete lack of interest, his indifference to me and my patients, his

unerring ability to do things as they should not be done if he does not, preferably, omit the doing of them altogether in his eagerness to be about his own concerns. If I followed my inclination, as I wish I could, I should ask him not to presume to treat my patients at all, for I never feel an easy moment when I have left him in charge of my service.

It would profit you, gentlemen, if you have not already done so, to think seriously of the use you are going to make of your hospital training. What kind of interne are you going to be? Do you look upon this next year simply as an additional tiresome preliminary to the practice of medicine? Or do you regard it as the climax of your medical education?

As a matter of fact, that is exactly what it is, the climax of your education, the keystone of the arch. Your education, in the formal sense of assigned work and set tasks, is finished, but in another and a larger sense it is just beginning. I have no wish to be platitudinous, but I cannot refrain from reminding you of what I know you have been reminded repeatedly throughout your college years, that in medicine you are serving a mistress which does not stand still. The aim of education, according to Locke, is simply to give us a relish of knowledge, and it would be well for you to remember that definition and to complement it with one of Maeterlinck's, that the aim of education is to increase our fields of conscious ignorance. You are burdened with facts now, but they are isolated and disconnected, they are useless to you unless they are interpreted in the light of experience, and, since you have as yet no experience of your own, you must apply your knowledge in the light of the experience of others.

The physicians under whom you will serve in hospital can teach you more than you have ever learned in your classes, but they cannot teach you if you are unwilling to learn. The attitude of a very large number of internes is just that: they are

unwilling to learn because they consider that their days of learning are over and done with. Each week I have a surgical clinic for medical students, and after the operation we talk together, the students and I, of the considerations of that special case. One topic, as you may imagine, leads to another, and in all humility I say that I consider this clinic a very valuable weekly exercise. But I frequently find myself alone in that idea. The students have no choice, they must listen to me, but the internes are not so situated. I am not surprised when certain of them depart as soon as their mechanical task of assistance is complete, for they are frankly doing their work simply because it has to be done, and they are taking on nothing beyond it. But I am constantly astonished at the number of intelligent, well-trained, apparently ambitious men who, immediately the operation is over, take their departure for fresh pastures, oblivious, it would seem, of the possibility that a man thirty-five years their senior might, even granting his defects, add something to the sum of their knowledge and experience. I would advise you to listen to what your staff men have to say, in their casual contacts as well as in their formal discourses. You will pick up from them a great many bits of useful information, you will learn what to do in given circumstances, and also, sad to say, you will often be shown by bitter experience what not to do.

You will have to do in your interne year a great many things which you will find monotonous and uncongenial, a great many things which you will perhaps consider beneath your dignity, for there is no person on earth, I have found, quite so insistent upon his dignity as is the newly qualified M. D. But I would pause here to remind you that nothing that has to do with the comfort and well-being of the patient can be beneath your dignity. Your days will be spent in a round of duties, your nights will be broken by calls to service, but do not resent these things, consider them only

as part of an experience you cannot do without. Despise not, as is the way of internes, the tasks which are not strictly yours, but rather rejoice in the added experience which you are thus gaining. I have often in my own hospital listened to the surgical supervisor calling for internes to assist in emergencies, the clinic calling for substitutes for absent staff men, the wards calling for special help, and as I heard these young gentlemen all with one accord begin to make excuse, I have marvelled at their conception of their hospital year. The laboratory, the ward, the clinic, the emergency room, the operating room, even the lowly record room, these are your postgraduate school, and the work that you will do in them, whether it be your own task or not, will pay you rich dividends in after years.

You might store in a corner of your mind the idea that you can learn much from nurses. As hospital castes go, I grant that they are your inferiors, but in knowledge and skill many of them equal the best of you. An experienced obstetric nurse, an experienced surgical nurse, can teach you a great deal that will be helpful to you if you will consent to be taught, and even a humble ward nurse can give you lessons in making a patient comfortable that it will profit you much to learn.

The interne is wise who sets for himself definite tasks in the laboratory in connection with every case which he handles. He is even wiser if he makes it his business to attend every postmortem for which he is free, not only those on his own service but those on other services. It is undoubtedly more important, as Lord Moynihan remarks, to know the pathology of the living, the conditions which cause present suffering and which are perhaps remediable, than to know the fullest particulars of that unhindered morbid change which has at last caused death, but he does not mean by that that the pathology of the dead can be ignored. The chief duty of the physician, I say again, is to heal the living, but the autopsy room is one of the places

in which he studies his art. In it the lifeless body, with all its secrets at last revealed, correlates facts, demonstrates mistakes, brings home the lessons of special diseases, as nothing else can.

You would do well to remember that your hospital year should be spent chiefly in the hospital. You need recreation, of course, but application to your work should be your primary consideration. The interne who signs out the moment his routine tasks are done, who is never at hand to take an emergency call, who considers his afternoons divinely appointed for golf and tennis and whose nights are given over to social gaieties, is throwing away the finest opportunities of his medical education, and he and his patients will alike suffer for it later.

One thing I would warn you of particularly: surgery is not learned in the interne year. The best hospitals do not permit junior internes to operate even under supervision, yet I can recall many an interne who gave me grudging service because I observed that ruling. If you are going to specialize in surgery, something more is needed than the mere decision to specialize. It was undoubtedly a cynic who defined a specialist as a man who was learning more and more about less and less, but even the cynic realized the necessity of learning, and that is what many of our so-called specialists do not. They are self-appointed, they are specialists in name only.

There should be nothing but condemnation for the man who, fresh from college and hospital, young in years and lacking what Billroth so well terms the hesitancy of experience, elects to do surgery except in the capacity of an assistant. The law permits it, but it is morally and ethically wrong. Any man with an M. D. degree can legally perform an operation, provided, as Finney says, he can find a person ignorant enough and foolish enough to permit him to do it, and it is to the eternal discredit of the medical profession that we allow such a situation to continue. It has been made easy, some English writer re-

marks, for the sons of Aesculapius to take too much upon them, and I hope that those of you who are going to be surgeons will remember that craftsmanship is not all of surgery. There must be knowledge and experience and judgment and conscience, and, to be very specific, there must be a profound understanding of surgical anatomy, for surgery undertaken without that special qualification can be nothing more than experimental. For more than twenty-five years I have been preaching to students without ceasing, and also, I regret to say, without any very perceptible fruits, that the only way to learn surgical anatomy is to learn it on the cadaver.

One last piece of advice: I hope that you will use your spare time—for you will have spare time, even if you do all the things I have suggested—I hope that you will use your spare time in learning the proper use of the library. If you already know how to use it and if you do use it, you are exceptional medical students. The average student, I find, has an unbounded respect for the printed word, in that he accepts with a childlike faith anything that he happens to find in a book. But the classification of references, the proper selection of authorities, the evaluation of facts, these are beyond his ken. As for using the library of his own volition, reading in it for personal pleasure and profit, entering it at all when he is not hounded into it by some impending assignment, these things are simply not done. If your early training has not included the use of books, you must set yourselves promptly to correct the defect, for the changing phases of medical science demand that you read constantly and widely. Regular reading and systematic study must be an integral part of your life, but do not let them be ends in themselves. Correlate the things you see in ward and clinic with the things you learn from books, apply to your daily work with patients the things you learn in reading. Remember Sir William Osler:

"The man who attempts to study medicine without books sails an uncharted sea, while the man who studies medicine only from books never goes to sea at all."

There is much more that I could say to you if time permitted. I could emphasize to you the importance of spending some years in general practice before you begin to specialize, and I could point out to you the usefulness and dignity of the life of a general practitioner if the specialties have no lure for you. I could remind you that the profession of medicine is a profession in which the material rewards are seldom large, and at the same time I could suggest to you that you do not make the mistake which many physicians of my generation, at least, are making, of permitting our patients to pauperize themselves and us by taking advantage of the notoriously unbusinesslike ways of medical men. I could even, I think, say a word or two on the subject upon which I had set out to speak to you when McConnachie took a hand, the relation of doctor and public. But after all, this is not necessary. If you do in your interne year the things that I have tried to indicate, if you make of that opportunity the best use that you can, your future career will, I am sure, lie fair and straight before you, and you will become practitioners of the medical art of whom your Alma Mater may well be proud.

ACUTE INTESTINAL OBSTRUCTION.*

CLAUDE F. DIXON, M. D.†

ROCHESTER, MINN.

There is not any acute abdominal condition in which recovery is more dependent on early diagnosis and early surgical interference than is intestinal obstruction. In surveying the literature of the last half century on this subject, one is struck with the appalling mortality; in the group of

*Read before the Louisiana State Medical Society, New Orleans, April 16, 1931.

†From the Division of Surgery, The Mayo Clinic, Rochester, Minn.

cases reported it varied from 45 to 65 per cent. This extremely high mortality has provided the stimulus for a vast amount of interesting and important experimental study of the normal and the impaired motor mechanism of the gastro-intestinal tract; interesting because the symptoms resulting from experimentally produced intestinal obstruction of animals approximate those of the human being suffering from a similar condition, and important because the results obtained in the methods of treating the animal in which obstruction has been produced experimentally have definite clinical application.

CAUSES OF SYMPTOMS AND NEED OF PROMPT MEASURES.

The discovery that certain chemical components are altered in acute intestinal obstruction was an invaluable contribution. Wilkie, MacCallum, Whipple, Tileston and Comfort, Haden and Orr, and their co-workers, demonstrated by direct experimental studies that when the upper part of the intestinal tract was obstructed, the following changes in blood chemical values were noted: decrease in the concentration of plasma chlorides, increase in the carbon dioxide combining power of the blood plasma, and increase in the concentration of non-protein nitrogen and urea nitrogen. McCann corroborated these results. Haden and Orr, in 1923, working on experimental intestinal obstruction, emphasized these changes in chemical constituents of the blood, and advocated the use of sodium chloride as treatment supplementary to surgery in combating the toxemia in cases of obstruction of the upper part of the intestinal tract. In a paper published in 1923 I called attention to the changes in the chemical constituents of the blood of several patients with obstruction of the upper part of the intestine, and attempted to show that administration of sodium chloride caused the blood chemical values to return to normal; also, that in the presence of benign or malignant lesions at the pylorus, which caused almost complete, or complete, obstruction, the pre-operative

administration of saline and glucose solution made it possible to carry out such surgical procedures as were indicated with minimal risk.

Brown, Eusterman, and others emphasized the renal involvement of patients suffering from duodenal obstruction. They reported ten cases. Five of the patients died; at necropsy, nephrosis, characterized by acute degeneration of the tubular epithelium, was found. Renal involvement in cases of intestinal obstruction is manifested by the presence of granular casts, hyaline casts, and albumin in the urine. These features are not observed until after the obstruction has been present for two or three days. The renal injury is not permanent, as is evidenced by the fact that when the blood chemical values are brought to normal by administration of saline solution, the result of examination of the urine are negative.

The symptoms which develop following obstruction in the gastro-intestinal tract are dependent, both in nature and in severity, on two factors: (1) Whether the occlusion is partial or complete, and (2) which segment of the gastro-intestinal tract is involved. Obstruction of the colon does not produce the symptoms, nor does it cause any alteration in the chemical constituents of the blood, unless it is of two to three weeks' duration. The clinical syndrome of acute obstruction has been attributed to loss of fluids and gastric juices by vomiting. This is true only in part. Rabbits cannot vomit; yet obstruction in these animals caused the same changes in blood chemical values as those found in other animals.

The loss of the entire gastric juice produces the same changes in chemical constituents of the blood as characterize obstruction of the upper part of the intestinal tract, is evidenced by the following case:

Case 1. The history of a man, aged thirty-eight years, is of unusual interest. Until four months previous to his admission to the clinic he had been in good health. At that time painless

jaundice had developed. Cholecystostomy was performed by a surgeon near his home, and jaundice disappeared. There was general improvement for three months, when periodic attacks of vomiting began. It was felt by his physicians at home that the loss of bile might be a factor in the gastric upset, and jejunostomy was performed. The tube in the jejunum and that in the gallbladder were then connected by means of a glass tube, allowing the bile to flow into the intestinal tract. The vomiting continued, and apparently practically all of the food taken was regurgitated.

Two weeks after the jejunostomy the patient was admitted to the clinic. He was in a semi-comatose condition; there was marked dehydration, a thready pulse, and a florid complexion. He apparently had no pain. The blood pressures, in millimeters of mercury, were systolic, 115, and diastolic, 78; the pulse rate was 90 beats a minute, and the temperature was normal. A firm, smooth mass could be felt in the upper right abdominal quadrant, apparently the liver. Ascites could not be demonstrated. Rectal examination gave negative results. The urine was acid in reaction, contained albumin, graded 2, many granular and hyaline casts, and several leukocytes. Erythrocytes numbered 4,720,000 and leukocytes 14,000 in each cubic millimeter of blood. By means of a Rehfuß tube, 1,200 c.c. of thin, watery gastric content were obtained. It contained particles of undigested food but no blood. Analysis of the gastric content disclosed total acidity 36 and a free hydrochloric acid 17 (end points in 10 c.c. of gastric content produced, respectively, by 3.6 and 1.7 c.c. of tenth-normal sodium hydroxide). A few hours after admission the patient had a severe convulsion which was characterized by clenching of the fists, with the thumbs turned slightly in. There was marked twitching of the facial muscles, and positive Chvostek and Trousseau signs. Emergency estimates of blood chemical values gave the following results: carbon dioxide combining power, 150 volumes per cent; plasma chlorides, 375 mg. for each 100 c.c., and urea, 88 mg. for each 100 c.c. Solution of sodium chloride, 0.9 per cent, was given intravenously in amount of 2,000 c.c. This was followed by marked improvement, and the patient regained consciousness. It was evident that the case was one of gastric tetany due to pyloric obstruction, and that the cause, probably, was malignancy. Intravenous injection of saline and glucose solution caused return to normal of the blood chemical values, in a period of four days. On the fifth day, examination of urine gave negative results. There was marked general improvement. Feedings were given through the jejunostomy tube. Aspiration of gastric content, at intervals of

eight hours, resulted in recovery of 600 to 800 c.c. of material, thus giving evidence of retention. Fluids or food were not given by mouth. When the administration of chlorides was discontinued for twelve or eighteen hours, blood chemical values characteristic of alkalosis appeared. These changes could be easily counteracted by intravenous or subcutaneous administration of saline solution, or by returning of the gastric juices to the intestinal tract through the enterostomy tube. This was evidently, then, a case of toxemia due to loss of gastric juices caused by pyloric obstruction. Although the process which caused the obstruction probably was malignant, the fact that the patient had gained weight by means of administration of saline and glucose solution and by feedings through the enterostomy tube, it was felt that exploration was justifiable. At operation, a carcinoma of the pancreas was found and obstruction of the pyloric end of the stomach apparently was complete. There was multiple metastasis throughout the abdomen and liver. The intestines were firmly matted together, and gastro-enterostomy was impossible. On the third day following operation, signs of pneumonia developed and the patient died on the fifth post-operative day. At necropsy, carcinoma of the pancreas was found, completely obstructing the common bile duct and the duodenum about 8 cm. below the pylorus.

If the loss of chlorides in the vomited gastric juices is responsible for the changes in chemical constituents of blood in cases of obstruction, as certain observers have advocated, one might suspect that the concentration of chlorides in the blood of the patient who is suffering from pernicious anemia, and whose stomach does not contain hydrochloric acid, would be reduced. Chemical analysis of the blood in such a case reveals that the value for chlorides in the blood plasma is normal, and in some instances higher than normal.

It has long been recognized that in cases of obstruction of the upper part of the intestinal tract, mechanical factors do not explain the entire clinical syndrome. There are numerous conditions which require much more extensive operative procedures than intestinal obstruction, and which consequently produce more shock; yet the mortality in cases of intestinal obstruction, if obstruction has been present more than a few hours, equals or exceeds that of

almost any other surgical condition.

Dragstedt and his co-workers have shown that, in the experimental animal, if all the gastric juices are lost, dehydration, and the changes in blood chemical values that are characteristic of intestinal obstruction are found. These animals invariably die unless chlorides are artificially supplied, or unless the gastric juices are replaced in the intestinal tract. Experiments were performed by uniting the duodenum to the esophagus, closing the cardiac end of the stomach, leaving the blood and nerve supply to the stomach intact, and bringing the pyloric end of the stomach out of the abdomen as a gastric fistula.

One might assume that this experiment produces a condition that is somewhat analogous to that seen in a case of duodenal ulcer with marked obstruction and vomiting. Under the conditions of the experiment, and in the duodenal condition described the chemical alterations in the blood are similar, and administration of solution of sodium chloride causes return to normal of blood chemical values, disappearance of dehydration, and a feeling of well-being. In duodenal ulcer with obstruction surgical relief is much less hazardous than it would have been without pre-operative treatment.

If obstruction occurs in the intestine, below the duodenum, vomiting takes place, and the usual changes in the chemical constituents of the blood are found, namely, decrease in the concentration of chlorides, elevation of the value for blood urea, and increase in the carbon dioxide combining power of the blood plasma. If the blood chemical values are restored to normal, the patient is still in a critical condition, whereas in pyloric obstruction he is not. Therefore, other factors must be taken into consideration in cases of obstruction below the duodenum. The experiments of Whipple, Hartwell, Houget, Dragstedt and their co-workers are of great value in this connection. Whipple and his associates are of the opinion that in obstruction the cells of the mucous membrane become perverted

and secrete a toxic substance. Hartwell emphasized that toxic substances are present in the lumen of the intestine and that they are not readily absorbed by the normal mucosa. Dragstedt has isolated a segment of intestine, closed both ends, and reestablished the continuity of the intestinal tract by end-to-end anastomosis. The blind loop becomes very markedly distended, and if the distention increases, the classical symptoms of intestinal obstruction develop and the corresponding alterations in the blood chemical values are found. If the isolated blind loop is placed immediately beneath the skin of the animal, so that it can be punctured by a hollow needle and some of its contents removed, improvement immediately follows, and the chemical constituents of the blood tend to return to normal concentrations. If, in addition, saline solution is administered intravenously, life may be prolonged for several days. If no treatment is carried out, and the content of the distended loop is not withdrawn, death occurs within twenty-four to forty-eight hours. The distention of the closed loop causes impairment in the circulation of the segment, and apparently because of the injured mucosa; absorption of the toxic products takes place.

In obstruction of the pylorus, then, toxemia is due to loss of certain chemical substances, but in cases of obstruction below the pylorus, toxemia results not only from loss of gastric fluids, but also from apparent absorption, by the injured bowel, of certain substances.

If a somewhat similar experiment is carried out, Dragstedt showed, but the ends of the isolated portion of duodenum or upper portion of jejunum are left open and in the abdominal cavity, peritonitis develops in only a few of the animals, and symptoms of obstruction do not occur. The animals live indefinitely. These open isolated portions are found to be sterile in from two to eight weeks, and if, after this time, their blood supply is injured, symptoms of obstruction or changes in blood chemical

values do not occur. If the blood supply to a similar but unsterilized segment is interfered with profound toxemia results, and death ensues in twenty-four to forty-eight hours.

I have observed many cases in which conditions simulated those of the experiment with the closed, isolated portion of bowel, as performed by Dragstedt. The following case may tend to show why better results are not obtained from enterostomy.

Case 2. The patient was a woman, aged thirty-eight years, who was admitted to the hospital in an emergency condition. The chief complaints were paroxysms of cramping pain in the right lower abdominal quadrant, vomiting, and complete retention of feces of four days' duration. Distention was marked. She was critically ill. The appendix and a right ovarian cyst had been removed nine years previously. A diagnosis of intestinal obstruction was made. A tube was inserted into the ileum, about 150 cm. from the ileocecal juncture. Local anesthesia was used.

Drainage from the stoma was free; 4,000 c.c. of material drained in the twenty-four hours following operation. The vomiting ceased. Before operation there was marked decrease in the concentration of plasma chlorides, elevation of blood urea, and increase in the carbon dioxide combining power of the plasma. Forty-eight hours after operation, following intravenous administration of saline and glucose solution, these values were normal. In spite of absence of distention, cessation of vomiting and return to normal of blood chemical values, death occurred on the eighth postoperative day. At necropsy, it was found that a portion of the ileum, about 50 cm. long, had fenestrated through the right broad ligament; both ends were completely occluded. There was no gangrene.

Enterostomy in cases of acute obstruction may cause abolition of the symptoms, and the blood chemical values can easily be brought to normal by administration of saline and glucose solution; yet the mortality remains high. It may be that the high mortality is the result of not evacuating the entire injured intestine, thus allowing continuation of absorption of toxic substances.

Paralytic ileus presents the same picture. The motor mechanism of the bowel has ceased. The largely dilated portions cause impairment to the intestinal circulation, and thus, injury to the mucous mem-

brane, which may be capable of absorbing certain toxic products. The toxic substances apparently are present normally in the intestinal tract.

McGarrison stated that he rarely saw a case of acute appendicitis during twelve years in India where the natives live mainly on carbohydrates. Wilkie, working with closed segments, similarly to Dragstedt, noted that the animals which received a diet high in protein died much earlier than those which received a diet of carbohydrates. This may suggest that the toxic substances absorbed in intestinal obstruction are of protein nature and that they probably are present normally in the intestine of the person who receives an ordinary diet.

Additional support is found in the work of Wangenstein and Chum, who showed that in animals with intestinal obstruction the intestinal content below the obstruction was equally as toxic as that above it.

The clinical syndrome of acute intestinal obstruction was mentioned by Newman in 1861 and soon afterward by Kussmaul. They emphasized such symptoms as dehydration, red facies, thready pulse, and vomiting, and described vividly the convulsions of gastric tetany. In 1898, Mayo-Robson described a case of convulsions, the cause of which, he strongly suspected, was strychnine poisoning. It was found to be a case of pyloric obstruction, and complete recovery followed gastro-enterostomy. Ten other patients, with similar symptoms, who had been observed previously to this one, died.

The key to low mortality in acute intestinal obstruction is early operation, with the idea of drainage of the obstructed portion.

SYMPTOMS AND DIAGNOSIS.

The symptoms which characterize intestinal obstruction are: (1) Pain of a colicky, cramping nature, as emphasized by Miller, (2) vomiting, and (3) shock or collapse. The diagnosis is not always easy. The symptoms present in acute obstruction may also be present in acute inflammatory

processes; the main point of distinction between the two is that localized tenderness and rigidity are signs of inflammatory processes, whereas these signs are rarely present in obstruction. Roentgenologic methods are of considerable aid in the diagnosis of intestinal obstruction. Normally, little, if any, gas can be visualized in the small bowel. A flat roentgenogram, in cases of obstruction, reveals the presence of gas and dilatation of the obstructed portion, giving a ladder-like pattern. Sirlin, in 1913, emphasized this feature, and it is of paramount importance as a supplementary means of diagnosis in many cases in which intestinal obstruction is suspected. The roentgenograms are made with the patient in a standing or sitting posture. If this is impossible, a lateral view will serve.

The peritonitis and marked ileus in the case represented in figure 1 followed removal of a retrocecal gangrenous appendix. Peristaltic noises could not be elicited. Recovery followed heavy doses of pituitrin.



Fig. 1. Flat roentgenogram in a case of peritonitis with marked ileus.



Fig. 2. Flat roentgenogram in a case of obstruction by adhesions in the pelvis.

The marked distention and the air-filled intestine formed a definite ladder-like pattern. In this case tenderness and some rigidity were present over the entire abdomen, which suggested an inflammatory condition rather than obstruction.

The patient represented in figure 2 was recently admitted to the clinic in a condition of emergency. Cramping, colicky pain in the lower part of the abdomen, vomiting, and collapse were the outstanding features. The symptoms had existed eighteen hours. Definite tenderness or rigidity was not present. Peristaltic noises were easily heard. The distended segment containing air could easily be visualized. Operation revealed a knuckle of ileum, 20 cm. long, completely obstructed by adhesions in the pelvis. An ovarian cyst had been removed twelve years previously. Uneventful recovery followed resection of the obstructed segment and end-to-end anastomosis.

Barium should never be given in cases in which obstruction is suspected. If occlusion is present, barium makes a critical condition worse. Auscultation of the

abdomen is extremely important if obstruction is suspected. The admixture of air and water in dilated, obstructed segments produces, with each peristaltic rush, a bubbling sound which Wangensteen has likened to the pouring of water from a jug. In ileus without obstruction there are faint peristaltic waves or none, and sounds cannot be heard; the abdomen is silent.

Fecal vomiting is a twofold symptom; it usually means obstruction and impending death. Perhaps a high percentage of the mortality due to obstruction can be laid to the fact that when most cases of the condition are seen, fecal vomiting is present.

TREATMENT.

It was once the custom, in cases of intestinal obstruction, to delay surgical intervention two or three days in order to try various temporizing procedures. However, postponement unquestionably frequently means disaster. A common cause for postponement is that the patient has been given morphine, and that his symptoms, for the time, are masked. Commonly, in acute intestinal obstruction, operation is postponed because so-called good results were obtained by enemas. The fecal content of the colon can be removed, of course, by enemas; gas, also, may be expelled; yet the small intestine may be completely obstructed. Therefore, the good results obtained by injection of various concoctions into the rectum cannot be relied on as evidence against the possible presence of obstruction.

In cases of acute intestinal obstruction of only a few hours' duration, surgical intervention, relieving the obstruction, is followed by recovery without enterostomy. In cases of long standing, in which the intestines are markedly dilated, exploration is inadvisable because it has been clinically demonstrated many times that fatal peritonitis may follow such practice. It is in this type of case that blind enterostomy is indicated.

Jejunostomy was once thought to be the solution of the problem of obstruction. It is now known that jejunal fistula produces

the same changes in chemical constituents of the blood as does duodenal fistula; namely, those alterations which are found in gastric fistula and obstruction. Therefore, unless the obstruction is in the jejunum, enterostomy in this portion of the bowel is to be avoided, and in cases in which the jejunum is obstructed, the imbalance of the blood chemical values must be carefully controlled by administration of saline solution. Multiple enterostomy, in an attempt to empty as nearly as possible all the distended, obstructed loops, may be the means by which many patients with intestinal occlusion of many days' standing can be saved.

In obstruction of the upper part of the jejunum, enterostomy at one place usually suffices. Frequently obstruction of the small intestine occurs in the distal part of the jejunum or in the proximal part of the ileum; in such instances enterostomy at two or three points in the distended or obstructed portion of the intestine is required. This usually necessitates two incisions and two stab wounds. Good evidence has been furnished that in cases of obstruction, toxic substances are also below the site of obstruction, in intestines that are of normal appearance. It is suggested that in certain cases enterostomy also be performed here, for the purpose of administering saline and glucose solution. In carrying out this procedure jejunostomy of the modified Witzel type and ileostomy may be performed, bringing the tubes not through the original incisions but through omentum, and thence through stab wounds. In this manner, leakage around the tube is prevented; yet means of possible drainage of the obstructed portion are afforded, and, also, irrigation can be carried out.

Spinal anesthesia can be employed profitably in cases of obstruction. In some instances it has brought about, by contraction of the bowel, release of the occluded segment, and spontaneous cure. If the obstruction be of three or four days' duration, the advisability of using spinal anes-

thetia may be questioned, for the additional shock from its use may be hazardous. Infiltration with procaine is satisfactory if there is a question as to whether or not spinal anesthesia should be employed.

The administration of saline and glucose solution is necessary for establishment of normal blood chemical values. Haden and Orr suggested that 1 gm. of sodium chloride to each kilogram of body weight be administered intravenously or subcutaneously.

SUMMARY.

Pain of a cramping, colicky nature, vomiting, and later shock and collapse are the outstanding features of acute intestinal obstruction. In acute abdominal diseases of an inflammatory nature, tenderness, rigidity, or both, are commonly present. In acute obstruction of the bowel these signs are usually absent. A flat roentgenogram of the abdomen in cases of obstruction contains the shadows of the distended, gas-filled, segmented loops. Gas is not normally present in the small intestine in sufficient quantities to cause distention. In pyloric obstruction, the loss of gastric juice seems the chief causative factor for the alterations found in blood chemical values. In intestinal obstruction there is also a loss of gastric juices but in addition there is apparently a toxic substance, of a protein nature, that is absorbed by the obstructed bowel. In pyloric obstruction, then, toxemia is apparently due to chemical deficiency, and in intestinal obstruction, to chemical deficiency together with absorption of toxic substances. The greatest life-saving factor in acute intestinal obstruction is early operation. Multiple enterostomy is suggested.

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DISCUSSION.

Dr. Lucian Landry (New Orleans): In connection with the very excellent presentation of Dr. Dixon, I thought it might be of interest to the Society to show the incidence of Intestinal Obstruction in the Charity Hospital for the past ten years.

Intestinal Obstruction in New Orleans Charity Hospital From 1920 to 1930.

Listed under the caption of intestinal obstruction we find 506 cases in the following divisions:

Children (Surgical)	58
Children (Medical)	27
Adults (Surgical)	276
Adults (Medical)	145

The analysis of the surgical children shows the following causes:

Intussusception	37	with	23	deaths
Adhesions	6	"	4	"
Intussusception with Merkel's diverticulum	2	"	2	"
Strangulated Hernia	2	"	2	"
Volvulus	2	"	1	"
Volvulus and Bands	2	"	0	"
Paralytic Ileus	2	"	1	"
Fecal Impaction	2	"	0	"
Parasites	2	"	0	"
Undetermined	1	"	1	"

Medical Children: 27

Cause Undetermined	10	with	7	deaths
Intussusception	15	"	13	"

One improved and one unimproved (was taken out of hospital same day admitted).

Fecal impaction	1			
Unimproved; one day in hospital.				
Parasites	1	"	1	"

Medical Adults: 145

Cause Undetermined	84	with	29	deaths
Adhesions	32	"	3	"

Two cured and 27 improved.

Fecal Impaction	7	"	1	"
Tumors	7	"	5	"
Intussusception	3	"	3	"
(within 24 hours).				
Meckel's diverticulum	3	"	3	"
Strangulated hernia	2	"	2	"
Paralytic ileus	3	"	2	"
Volvulus	2	"	2	"
Ruptured Pus Tube	1	"	1	"
Stricture of lower bowel	1	"	1	"

Surgical cases Adults: 276

Adhesions	139	with	77	deaths
Volvulus	50	"	32	"
Undetermined	20	"	16	"
Strangulated Hernia	19	"	11	"
Tumors	14	"	12	"
Intussusception	10	"	2	"
Ileus	10	"	6	"
Meckel's diverticulum	5	"	4	"
Adventitious bands	5	"	3	"
Fecal Impaction	1	"	1	"

Cicatricial stenosis	1	with	0	deaths
T. B. Peritonitis	1	"	1	"
Kink of terminal ileum	1	"	1	"
Megalocolon	1	"	0	"
Mesenteric thrombosis	1	"	1	"
Abscess of abdominal wall	1	"	1	"

Dr. Alton Ochsner (New Orleans): I think as important a subject as intestinal obstruction should not be allowed to pass without some discussion. Dr. Dixon has certainly brought a real message to us, as he always does.

In considering intestinal obstruction, it is advisable to differentiate obstructions in three different ways: 1. The "high" from the "low" obstructions, 2. those in which there is interference with the blood supply from those in which there is none, and 3. the mechanical from the adynamic or paralytic type of ileus. The grouping of cases of ileus according to the above schema is important both as regards therapeutics and prognosis.

The prognosis is good in mechanical obstructions, especially in those located in the lower part of the intestinal tract. The prognosis is bad, however, in all high obstructions. I think the difference in symptoms in cases with low and high obstructions is because of the difference in vascular interference. As demonstrated by Morton and Dragstedt the upper portion of the intestinal tract, the duodenum and the upper portion of the jejunum, is largely secretory whereas the lower portion is largely absorptive. Dragstedt and his associates have shown that the vascular supply of the upper portion of the intestinal tract is entirely different from that of the lower intestinal tract. In the upper portion of the intestinal tract, in the duodenum, for instance, the arteries are largely intramural. If one considers a cross-section of the bowel in the upper portion of the intestinal tract (and remembers that the blood supply enters at the mesenteric border) Dragstedt has demonstrated that the vessels are intramural or enter the muscles relatively close to the mesenteric attachment. In the lower portion of the intestinal tract the vessels course around outside of the wall of the gut and lie beneath the serosa and do not enter the bowel until relatively far around the periphery of the gut. This means that everything else being equal, any increase of pressure in the upper portion of the intestinal tract will exert more pressure on the blood supply and will cause an earlier interference with the blood supply to the gut.

Not only is there this anatomic difference, but there is also a physiologic difference in that the upper portion of the intestinal tract is secretory and there is a great deal more secreted in the intestinal tract in the upper portion. This undoubtedly accounts for the poorer prognosis and urgency of treatment in high intestinal obstructions.

I am personally convinced from experimental work which we have done that even though the blood changes, which Dr. Dixon has spoken of, play a very important role in the causative symptoms and in the subsequent course in cases of intestinal obstruction that there is, in addition, in cases of high intestinal obstruction an added factor, a toxemia. In spite of the recent work from Wilkie's clinic, in which it was shown that the blood changes are the only changes which occur, I think, however, we have to accept that in the "high" intestinal obstructions, in the closed loop obstructions which Dr. Dixon described, there is an additional factor, a toxemia due to the breaking down and absorption of a split protein molecule which produces the death of these individuals.

Dr. Ambrose H. Storck (New Orleans): There are three points to which Dr. Dixon has alluded, which I think are very interesting, some of them in regard to diagnosis, and others in regard to treatment, of obstruction.

Of course, the changes in chemistry, CO₂ combining power and chlorides, which he mentioned, occur only in rather advanced obstruction. The early diagnosis has to be made on clinical symptoms. The changes in chlorides and CO₂ are not very marked for some hours unless the patient has been vomiting considerably. Furthermore, along with the loss of chlorides, there is a loss of fluid content of the blood, which sometimes results in chlorides not being relatively altered to an appreciable degree.

The presence of fluid levels is an important finding in cases of suspected obstruction. I have had occasion to notice, on a number of occasions, the presence of fluid levels in old individuals with an adynamic ileus, and in these cases I have decided not to operate because the ileus was not preceded by cramps. Some of those cases died and were found not to have any mechanical obstruction. The others recovered without surgical intervention. Also, fluid levels are found in cases of enteritis, such as typhoid enteritis, and in some cases in which an enteritis is associated with a mesenteric lymphadenitis, probably due to Gaertner or dysentery bacillus infection. The cases in this last-mentioned group have peristaltic cramps, and on a number of occasions have been operated upon, and no mechanical obstruction found.

The third point was the one made in regard to the necessity of either doing multiple enterostomies, or in some way assuring the evacuation of the gas and fluid contents of the obstructed loops of bowel. For some time I have been carrying out a procedure which Moynihan recommends, and which has been quite satisfactory, i. e. making a temporary enterostomy and completely

evacuating the small gut. On a number of occasions I have found that doing a simple enterostomy has been unsatisfactory, because the nearby loops of distended gut cause kinking or compression of the loop of bowel in which the enterostomy tube has been introduced, resulting in a non-functioning enterostomy. Complete evacuation of distended loops at time of operation helps many patients to survive, and permits others to recover without going through several days of severe distention.

If it is decided not to do an evacuation of the entire contents of the small gut, but rather to do a simple enterostomy, it is a good plan to have the nurse clamp off the tube for about one hour every three hours. This procedure favors the filling of the loop in which the enterostomy has been done.

Dr. B. C. Garret (Shreveport): I enjoyed Dr. Dixon's paper, and I want to admit that I am up here for information.

I recently had two cases of obstruction of the bowels and I lost them both, so if the doctor can tell me in closing how to handle these cases I would be glad to hear it.

One of my cases was an old lady seventy-three years old with an obstruction. We thought we were doing a colostomy early. According to the doctor's technic, we used very similar methods. She died and we did not get an autopsy.

Less than a year ago I had a man come in with carcinoma of the sigmoid. We did the typical operation getting him ready for something further. He drained plenty, lived about a week and died. We used everything at our command, such as the duodenal tube, and this and that. We did an autopsy on the second case. He had no peritonitis. We kept up with his blood chemistry and tried to keep that as nearly right as we could, but we lost him on the seventh day.

So if there is a happy medium when you hit these cases and there is anything further to know to do than what we did, I think we should get it. I personally admit my ignorance on knowing how to handle them.

Dr. J. A. Danna (New Orleans): I think after the wonderful and complete covering of the subject by Dr. Ochsner any further comment is really superfluous.

There is only one point, in an audience of this kind, that I would like to mention and that I have tried repeatedly to make, and that I made yesterday morning in discussing the subject of the acute appendix, and that is that if you are going to save these patients you have to operate on them early. You have to, as it were, operate before you are sure that the patient has intestinal obstruction. In other words, if you are going to make a mistake, make the mistake occasionally

of operating on a patient who has not intestinal obstruction. If you do this, in the long run you will save quite a number of your patients who otherwise would die.

Dr. Isidore Cohn (New Orleans): I don't think there is much to add except, as Dr. Danna has said, try to make the diagnosis early before you have all the pathognomonic symptoms and signs of impending death.

Dr. C. F. Dixon (closing): I appreciate very much this splendid discussion and from what experience I have had I heartily agree that early operation certainly is the thing that offers the best means for recovery of these cases.

INDICATIONS AND METHODS OF BLOOD TRANSFUSION.*

W. K. IRWIN, M. D.,

BATON ROUGE.

HISTORICAL.

From certain Egyptian and Hebrew manuscripts it is apparent that the transfusion of blood was at least considered a possibility in the very early times and perhaps was even attempted, for in an old Hebrew¹ manuscript appears the following: "Naam, leader of the armies of Ben-Adad, King of Syria, afflicted with leprosy, consulted physicians who in order to cure him drew out his blood and put it in another patient." In 1492 an attempt was made to prolong the life of the aged Pope Innocent VIII by a blood transfusion. It was not uncommon at this time for people to drink blood and it is thought by some that this is the way the blood was given the Pope.

The first transfusion upon a human being that we have definite knowledge of appears to have been done in France by Jean Denys² of Montpellier, physician to Louis XIV, July 15, 1667, though ten years previous the Benedictine monk don Robert des Gabets, had performed transfusions on animals. Denys' patient was a youth of fifteen years who had a violent fever and had been bled twenty times in an attempt to reduce the temperature. He withdrew about three ounces of the patient's blood

at 5 a. m. and then exposed the carotid artery of a lamb, which was connected with the patient's vein and about ten ounces of arterial blood was given. At 10 a. m. the youth was able to arise and appeared greatly improved.

About this same time Richard Lower and a group of English experimenters were transfusing animals.

Bad results naturally followed the promiscuous injection of animal blood into human beings and the procedure was abandoned for over a century. In 1824 James Blundell of England reported a successful transfusion of blood from one patient to another, by using a special syringe which he had devised.

In 1901 Landsteiner discovered agglutinins and iso-agglutinins in the blood and six years later Jansky³ the four blood groups. Moss in 1910 also discovered four blood groups. All that remained to make the transfusion of blood a safe therapeutic measure was the discovery of some method for transferring the blood from the donor to the patient before clotting took place.

METHODS.

A search for the ideal method has been prosecuted as assiduously as Ponce de Leon's quest for the "Fountain of Youth" and there is hardly a month passes that at least one new method is not reported; therefore, I will only attempt to touch on the methods which have been most commonly used.

The methods of blood transfusion are the direct and indirect, which classification is misleading to most of us as the direct method is the artery to vein type as advocated by Crile, Brewster and others, while the indirect method is where modified and unmodified blood is used. Today when we speak of a direct transfusion we mean one in which we use unmodified blood and of the modified blood for the indirect method.

Some of the apparatuses used for transfusing blood are:

1. Unger.
2. Scannell.

*Read before the Louisiana State Medical Society, New Orleans, April 14-16, 1931.

3. Lindeman multiple syringe cannula.
4. Parrafin tube of Percy.
5. Stoll's modification of the Lindeman.
6. Various types of modifications of apparatuses.
7. Kipton-Brown tube.
8. Jube's⁴ method embodies the use of a very small syringe with a control valve by which suction and traction can be made; that is, by which the blood may be alternately withdrawn from the donor and injected into the recipient.
9. Feinblatt's⁴ apparatus has two disks rotating one upon the other at an angle of 90°. The proximal disk is perforated to form a channel for connection with a record syringe attached to it.

The Unger and Scannell seem to be the most popular as well as practical of all the different types advocated; however, some of the modifications of these methods are very good.

Osborne A. Brines of Detroit uses a modified Unger which seems to be very practical, as it has two 20 c.c. record syringes which are attached to a stationary apparatus, which has a four-way stopcock that permits the passage of blood through either the donors' or the recipients' needles. When the operator is giving the patient blood the assistant is drawing blood from the donor, then when the stopcock is turned to the opposite side the reverse is true.

The Scannell⁵ apparatus has many good features. The syringe has a wide throat which is important, the joints are interchangeable and are fitted with a lock, which insures against leakage and are locked by a quarter of a turn. It is equipped with an emergency pipe line running to a basin of saline solution, by means of which the syringe can be washed out instantly without disconnecting a single joint. It has a needle which can be fixed to the skin after it has been inserted. It also carries cannulae of various sizes. The needles and can-

nulae are so fitted with a special lock which prevents them coming apart. The valve of the syringe has a three-way unit, the handle being so placed that it can be moved readily with the thumb of the left hand. The syringe has a large opening with a bayonet lock type with three outlets. One tube leads to the donor, one to the recipient and one to the basin of saline. Only one line can be opened at a time. The diameter of the bore through the valve is 3 m.m. which insures free and easy passage of blood. The third tube can be used to draw up saline into the syringe to determine if the needle is in the recipients vein or to wash out the syringe in case the piston begins to stick. It can also be used to inject solutions into the donor at the end of the transfusion. There is a hole through the metal tip of the syringe 3.5 m.m. in diameter. On the under side there is a finger grip for easy and secure grip. The apparatus also has a valve adapter so that in the event of the syringes being broken any standard syringe can be used in an emergency. My greatest objection to the Scannell is that the blood will clot either in the syringe or tubes if you do not work fast and it is a good idea to have some help handy for it has been my experience that one man can not do a transfusion without help.

AUTO-TRANSFUSION.

There are other types of transfusions that have their places such as auto-transfusion. This type is advocated in ruptured extra-uterine pregnancy where the blood is drawn out of the abdominal cavity with a suction apparatus into a container which has a solution of sodium citrate. This mixture is strained through sterile gauze and reinjected into the patients vein.

VACCINE TRANSFUSION.

Faber of San Francisco conceived the idea of testing adult donors' blood for viricidal properties in the treatment of poliomyelitis,⁶ which had the advantage over the pooled serum of convalescents as there was a great deal more serum available and it was more potent.

EXSANGUINATION TRANSFUSION.

In cases which are septic, some of the

blood is withdrawn and this is replaced with blood from healthy donors. In this method of transfusion it is necessary to have several donors, as a great deal more blood has to be given. It is recommended in illuminating gas poisoning.

The citrate method of Lewishon is the most universally accepted method used for transfusing modified blood. He advocates using 10 c.c. of 2.5 per cent solution of sodium citrate to every 100 c.c. of blood.

Advantages of whole blood methods are:

1. No foreign body is injected.
2. It is quickly and easily performed.
3. Less chance of contamination.
4. Fewer reactions.
5. Platelets are not disturbed.
6. Less chilling of blood.

Disadvantages of whole blood methods are:

1. Requires a special apparatus.
2. Donor and recipient have to be in same room.
3. Blood clots in apparatus.

Advantages of the Citrate Method:⁷

1. Simplicity and ease of use.
2. Apparatus is inexpensive.
3. Allows preservation and transportation of blood.
4. Avoids all possibility of infecting donor in septicemia or lues, etc.

Disadvantages of the Citrate Method:

1. Difficulty in getting uniform mixture of blood and citrate.
2. Formation of clots in receptacle.
3. Danger of contamination.
4. Reduces⁸ phagocytic and opsonic powers of the blood.
5. Necessity of filtering to avoid clots.
6. Citrate tends to destroy blood platelets which play a part in coagulation.
7. Greater number of reactions.
8. Alters blood cells liberating anticomplementary substances.

SELECTION OF DONORS.

In selecting a donor it is best to get a young robust subject. Relatives are preferred to professional donors, however, regardless of who the donor is; it is very important to have a Wassermann run and exclude syphilis and such diseases as tuberculosis, measles and malaria. When possi-

ble, it is good to get a donor from the same group as the recipient. All bloods should be matched and cross agglutinated in order to insure compatibility as this is the cause of a great many reactions. In case a donor is used for more than one transfusion on the same patient, the blood should be matched each time as the formation of isoagglutinins after a transfusion might cause a reaction.

REACTIONS OF TRANSFUSIONS.⁹

The warning symptoms are: restlessness, flushing of the face, severe headache, precordial pain, sweating, pain in the lumbar region, rapid pulse, nausea, cyanosis, rise in temperature, chill, dyspnea, hemoglobinuria, and jaundice.

Dangers of transfusions:

1. Incompatibility.
2. Too large amount of blood given.
3. Too rapid administration.
4. Emboli, air or blood clot.
5. Transmission of Disease.

INDICATIONS.

As early as 1872 Leistrunk³ said, "Transfusion is indicated in all of those pathogenic conditions in which the blood is unfit to fulfill its physiologic duties," and at the present time we will have difficulty in trying to improve on this statement.

The trouble with a great many of us is in waiting too long before giving a transfusion. We should give them in the following conditions:¹⁰

1. Severe Hemorrhage due to
 - a. Trauma.
 - b. Post Operative Conditions.
 - c. Puerperal Hemorrhages.
 - d. Ruptured Ectopic Pregnancy.
 - e. Surgical Shock with Bleeding.
 - f. Massive Hemoptysis.
2. Hemorrhagic Diseases of the Blood.
 - a. Hemorrhagic Diathesis of the New-born.
 - b. Hemophilia.
 - c. Purpura.
3. Illuminating¹¹ Gas Poisoning.
4. Blood Dyscrasias.
 - a. Pernicious Anemia.
 - b. Leukemia.
 - c. Hodgkins.

- d. Banti's Disease.
- e. Primary and Secondary Anemia.
- 5. Sepsis.
 - a. Streptococcic Septicemia without Heart Involvement.
 - b. Other Acute Septic Cases.
 - c. Chronic Sepsis with Anemia.
 - d. Agranulocytosis.¹²
 - e. Severe Burns.
- 6. Poor Surgical Risk Conditions.

The above mentioned indications are just some of the more important ones which are benefitted by blood transfusions, although there are many others.

In pediatrics¹³ there are several indications for the administration of blood such as,

- a. Malnutrition.
- b. Intoxications.
- c. Congenital Lues.
- d. Burns.
- e. Pneumonia.
- f. Septicemia.
- g. Erysipelas.

When giving blood to children it is best administered in the longitudinal sinus and intraperitoneally, however, it can be given intravenously and intramuscularly in older children.

CONTRA-INDICATIONS.

- 1. Pulmonary Edema.
- 2. Advanced Cases of Nephritis.
- 3. Myocarditis.

CONCLUSION.

The success of a transfusion depends on the following:

- 1. Compatibility of the blood.
- 2. Practice and patience on the operator's part.
- 3. Suitable donor.
- 4. Correct preparation of apparatus used.
- 5. Slow administration of the blood.
- 6. Accurate knowledge of the technic in all of its details.

Give transfusions more as prophylactic measures rather than as a life saving measure.

If the question arises as to whether or not to give a transfusion the best bet is to go ahead and give it.

All cases with a hemoglobin below 45 per cent or with a red cell count of less than three million should be transfused.

There are certain conditions in which the citrate method should not be used such as hemophilia, purpura and hemorrhagic diathesis of the newborn as the whole blood is much better for these cases.

We are all prone to be partial to the new apparatuses and condemn the citrate method but there are many times when the direct methods fail and we resort to the old standby, the citrate method.

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DISCUSSION.

Dr. U. S. Hargrove (Baton Rouge): I can not add anything to the general indications and different methods which Dr. Irwin has very thoroughly covered, but wish to emphasize one or two points he has already made.

In the different diseases and conditions in which blood transfusion is indicated there are certain physiological indications to be met. For example, in acute surgical or traumatic hemorrhage in which the hemorrhage can be or has been controlled with surgical measures, the chief indications for transfusion is the replacement of the volume of blood and replacement of the red cells.

The citrate method, I feel, fulfills these requirements just about as well as the transfusion of whole blood because the citrated blood certainly replaces the volume just as well and the red cells are unaltered thereby fulfilling the requirements and producing the results we expect from transfusion in cases of acute hemorrhage.

We can also replace the volume of blood lost by foreign substances, such as saline solution.

Another group of conditions, such as poor surgical risks, patients ill with chronic cachectic diseases and postoperative conditions, I think have three chief physiological indications: first, the stimulating effect on the patient and also on the blood forming organs particularly; second, the replacement of red cells lost; third, the addition of nourishment to the patient's system.

The stimulating effect, I believe, can be obtained as well from the citrate method as from the whole blood method. The red cells can also be replaced as they are unchanged. Likewise, the nourishing substances in the plasma are unchanged by the citrate solution. Those indications are probably met as well by the citrate method as by the whole blood method.

There is a group of cases, though, in which there is a new indication to be met, physiological indication, and that is conditions in which the coagulability of the blood has been decreased. The puerperic conditions probably form the chief group of such diseases. In the puerperic diseases, for reasons probably not well known or well understood, the coagulability of the blood is greatly decreased. While the coagulation time as commonly taken may be normal or even less than normal, still bleeding takes place in various cavities of the body and also of the skin and mucous membranes. I think the chief indication to be met here is the increase in coagulability of the blood.

The addition of any coagulant, such as sodium citrate, to the blood stream in these conditions would seem to me to be a definite contraindication, and in the case of acute puerperic hemorrhage the citrate method, I believe, would do more harm than good. However, the addition of whole blood with the platelets unaltered, the platelets being probably the chief constituent of blood which has to do with coagulation, is certainly the remedy of choice and acts as a specific in these conditions.

The only other point I wish to make is that since whole blood transfusion is certainly the method of choice in certain conditions, such as puerperic diseases, every doctor who has occasion to do transfusions should select one of the numerous methods available and perfect himself in the technic of that one method and not search around every time he goes to do a transfusion

for a different method. Unless he takes one method and practices that and uses it frequently he will probably fail with the whole blood transfusion just at the time he needs it, and have to resort to a citrate method which possibly would be a contraindication.

Dr. J. A. Hendricks (Shreveport): Dr. Irwin covered the subject so thoroughly and so nicely I am mighty glad to agree with him.

I think it is mighty important in giving blood transfusion, if needed, to give it early. I think all hospitals should have a number of type individuals from whom they know they can get blood at any time. If they have to send out and get a lot of people to type, in severe cases of loss of blood you lose the most valuable part of your treatment.

About six years ago in Shreveport we had what we thought was a new indication for blood transfusion which was very effective. We had a most obstinate case of erysipelas. In spite of the serum and all the treatment we gave, he continued to get worse for about a month. His red blood got very bad. His boy typed with him very nicely. We gave one blood transfusion and that fellow was practically well the next day. It was magic. We, of course, thought we had struck something mighty nice. However, we tried it on a number of cases and we found it was just a coincidence. We tried them on septic cases and our results weren't so good.

The important thing in blood transfusion, I think, and the one valuable point is that in severe loss of blood let the patient have it early, and today you have to have your donors typed long before you need it.

Dr. Waldemar R. Metz (New Orleans): I enjoyed Dr. Irwin's paper very much; the subject of blood transfusion is one in which I have particularly interested myself for a good many years.

Back in 1914, during my residency at Mt. Sinai Hospital in New York, I had the opportunity to play some minor role in the earlier investigations of the citrate method with Dr. Richard Lewisohn, one of the fathers of this method. About the same time a fellow resident, Dr. Lester Unger, proposed a syringe method of transfusion, probably the first one of that type that had been put forth. Being a well endowed institution with a long list of professional donors we had great opportunity to make comparisons between the merits and demerits of the citrate and whole blood unmodified methods.

Up to 1913, as you know, methods of transfusion were very difficult and formidable. It was a major, heroic, operative procedure requiring a great deal of technical skill and offering a great deal of technical difficulty, in which few were

qualified, so that as a universal thing blood transfusion was an unusual operation.

In 1913, with the proposal of the Kimpton-Brown method (still a good method although the refinements of present methods are better) transfusions became more numerous.

With the almost simultaneous introduction of the citrate method in 1915 by Dr. Lewisohn, the late Dr. Dick Weil of New York, and Dr. Agote of Buenos Aires, a method was presented to the profession which by reason of its simplicity of administration the fact that blood could be conveyed over a distance and be given in the home. The fact that with proper refrigeration it could be preserved for varying periods of time and then introduced and also because it obviated the presence of the donor at the time of the operation, it became immediately popularized and for a time at least citrate transfusion was the method of choice wherever transfusions were indicated.

And then with time and continued use certain clinical and biological phenomenon presented themselves which went a long way toward slowing the enthusiasm for the citrate method and indeed was calculated to limit its field of application and its usefulness. It was found, following a long statistical survey, that the reactions incident to blood transfusion were more pronounced and were more frequently encountered following the citrate method than after whole or the modified whole blood method. It was found that a chill occurred in not over three and one-half to four per cent of whole blood transfusions as compared to some fifty-seven per cent with the citrate method, granting of course that the recipient and donor were of the same groups and complementary.

It was found that a temperature ranging from 100° to 106° occurred in less than ten per cent of the cases of following whole unmodified blood transfusions as compared to some sixty per cent with the citrate method.

In the beginning, these reactions were considered only transient in their effect with no deleterious results, but when we consider that the recipients of transfusion are, as a rule, critically ill individuals a further shock, a further drain on an already sagging metabolism can do no good, and in all probability does harm.

So much for the clinical side. From a biological or serological angle Unger writing in the *Journal of the American Medical Association*, I think in 1920 or 1921, and following investigations of his own (laboratory investigations) reported that sodium citrate interfered with the complement, that it lowered the opsonic index, that it decreased phagocytosis which had already been shown by Drinker and Brightenheim in 1919, and that the

mere addition of sodium citrate altered the constitution of the red cells and rendered them more fragile and that it destroyed blood platelets. And while all of these conditions have not been confirmed by other investigators the fact that sodium citrate does interfere with complement has been well established, so that it seems reasonable to assume that to introduce a blood deprived or diminished in its protective powers into a case, for instance, of septicemia is to introduce a perfect pabulum for further bacterial propagation.

In conclusion, I believe the indications for sodium citrate transfusion and unmodified blood are rather definite. It is my opinion that sodium citrate is applicable in secondary, traumatic, postoperative hemorrhage where we want blood volume and hemoglobin, and that unmodified blood transfusions are indicated wherever transfusions are given more particularly in the septicemias, toxemias and in certain of the blood dyscrasias.

As to methods, probably because I am more familiar with the Unger method and because it has proven satisfactory in my hands I have employed it almost to the exclusion of other methods. I have tried out the Scanlon apparatus, the Costa apparatus, the so-called Multiple Syringe method of Strauss which is not a new method at all, but the old Howard Hinderman method where 100 c.c. syringes have been substituted for 20 c.c. syringes. I have used the Unger method well over 300 times and have had no failures. I have had some difficulties it is true but they have been the difficulties that are common to all types of syringe methods, namely, improper introduction of the needle into the vein or where the bevel of the needle is in too close approximation with the intima of the blood vessel or where due to the apprehensiveness of the recipient or of the donor by an inadvertant move the needle is jerked out of the vein itself.

With the Unger method there is a solution of saline constantly following from the syringe into the donor, on the one hand, and into the recipient on the other hand, and under adverse conditions like the necessity of picking out another arm and another vein, by a small flow of saline solution we keep the apparatus going until it can be adjusted.

Dr. W. K. Irwin (closing): I want to thank these gentlemen for their discussion. There is very little I have to add in closing.

The point Dr. Metz brought out in regard to advocating a direct method over the citrate method is very good, but it is very true that you have to be familiar with the apparatus and have to have lots of practice, and time and patience. If you don't, you are going to get some failures.

SMALL DOSES OF THE ROENTGEN RAYS IN THE TREATMENT OF INFLAMMATORY CONDITIONS.*

AMEDEE GRANGER, M. D.,

NEW ORLEANS.

Our interest in this subject was revived about two years ago when we observed the curative effect of the roentgen rays on inflamed mastoids while engaged in an intensive radiographic study of the infantile mastoids. We noticed that in a number of these little patients with definite roentgen signs of inflammation of the mastoids but with no roentgen evidence of breaking down or destruction of the mastoid, that the pain and tenderness diminished noticeably or disappeared a few hours after the radiographs were made, and that after an occasional slight rise in temperature the latter would drop often to normal, and the discharge from the ear would diminish in quantity or become thinner and more watery.

These observations were most convincing when the disease was bilateral, and the discharge would dry up on one side and all the symptoms clear up after the first irradiation while the other side would require from one to three more irradiations before cleaning up, or our sign of extensive destruction of the mastoid becoming visible on the later radiographs, operation was advised, and being performed confirmed the breaking down and destruction.

Three of these cases of bilateral mastoid infection were especially interesting. In one only, one side was irradiated with the result that at the end of a week the discharge had ceased and the tenderness had disappeared, while the other side which had received the same local treatment consisting of irrigations, etc., showed no appreciable improvement. It was now irradiated and a few days later all signs of disease had disappeared.

The other two cases showed an abate-

ment of all the signs of disease on one side, six and seven days respectively after a radiograph of both mastoids was made, but three weeks later the other ear was still discharging. The discharging ear was irradiated while making another radiograph of it to determine its condition and to see if our sign of marked breaking down was present. This sign was absent, the condition of the mastoid as seen on the radiograph appeared quite the same as in the first radiograph. Within the week following the second irradiation the symptoms cleared up completely.

The dose of the roentgen rays received by these patients during each radiographic exposure is approximately $1/20$ of the erythema dose. Of course, we only recommend this treatment in cases where the clinical and roentgen examinations reveal no signs of breaking down and destruction of the mastoid. In the continued absence of clinical signs of breaking down the roentgen treatment should be repeated every 5 or 6 days but never without making a radiograph at the same time for a check up of the roentgen findings, and if on these later radiographs our sign of destruction of the mastoid becomes visible further roentgen treatments must be discontinued and the attending oto-laryngologist apprised of this fact at once.

In our experience, from one to three irradiations suffice in the cases that will obtain benefit from the roentgen rays. However, if check up radiographs are made each time and if the little patients are under the observation of a competent oto-laryngologist no risk is taken and no harm can come from giving a larger number of treatments in the refractile cases with slight but persistent discharge from the ear. Some of our hospital patients received from 5 to 7 doses of the roentgen rays over a period of 6 weeks before a cure was effected.

These mastoid cases reminded us of the very satisfactory results obtained by us many years ago from the treatment of carbuncles with $1/4$ to $1/2$ erythema doses of

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the roentgen rays, and we thought the time opportune to call your attention to this little known and much neglected use of the roentgen rays.

For several years our thought and time have been given almost exclusively to the diagnostic uses of the roentgen rays, and we had ourselves almost forgotten the large field of usefulness for the therapeutic properties of the roentgen rays in inflammatory conditions until forcibly reminded of it by the accidental discovery of its value in acute mastoid infections, and to have it further emphasized a short time later by hearing Dr. Desjardins of the Mayo Clinic present this important subject and make a strong plea for its more general appreciation and use before the Section of Radiology of the American Medical Association in Detroit last June. I advise all of you to read this splendid contribution by Desjardins in the February 7, 1931, issue of the *Journal of the American Medical Association*.

In this article he briefly gives his personal experience and cites more than 90 articles reporting good results from the use of the roentgen rays, in doses of from 10 per cent to 50 per cent of the erythema dose, in one or more of the following inflammatory conditions, furuncle, carbuncle, cellulitis and phlegmon soft tissue abscesses, para-nephric and peri-nephric abscesses, peri-dental infection, acute adenitis, onychia, paronychia, orchitis, epididymitis, mastitis, frontal and maxillary sinusitis, otitis media, unresolved pneumonia, trachoma, erysipelas, parotitis and nephritis. Some of these references date back to 1903. In 1905 Musser, the elder, and Edsall, reported a case of delayed pneumonic resolution in which irradiation was followed by rapid resolution and improvement. These authors attributed the good results to the fact that the roentgen rays accelerated the action of ferments and stimulated autolysis, but they admitted "the widespread and excited tendency to give ferments a more important part than was their due."

We believe that the following case history will prove of more than passing interest:

CASE REPORT.

J. B., white male, 10 years old, admitted to the Charity Hospital on July 10, 1930, with the clinical diagnosis of post-typhoid osteomyelitis. Five weeks previous to admission became ill with typhoid fever. Blood tests were positive. Fever subsided about 15 days before admission but did not disappear. Twelve days before admission pain developed in the right thigh and inguinal region. The pain was not continuous, but appeared in paroxysms. There was no redness, heat or swelling. Rotation of thigh produced pain. Physical examination showed the limb in semi-fixed external rotation. Abduction and rotation of thigh caused exquisite pain, the pain was in the region of the great trochanter. There was a slight elevation of temperature. July 11, 1930, —A radiograph of the pelvis and both hips and thighs showed a diaphysitis with necrosis of the upper end of the diaphysis of the right femur and marked peri-articular swelling. July 19—Another radiograph showed practically the same condition as on the 11th instance. Aug. 7—The clinical report shows the patient much improved, there was no tenderness on palpation and the thigh could be moved freely without pain. The next day, August 8, a radiographic examination showed apparent absorption of the necrotic area in the upper end of the diaphysis of the femur, clearing up of the surrounding area of osteitis and disappearance of the peri-articular swelling. Aug. 19 another radiograph showed evidences of bone repair and no sign of inflammatory process in the diaphysis. August 25—Radiographic examination showed clear bone detail in upper end of the diaphysis with very satisfactory bone repair and no sign of inflammatory process in the bone. August 26—The patient was discharged from the Hospital as cured. The patient received no other treatment than the rest, tonics and the irradiations incidental to the making of the radiographs. The dose received during each exposure was approximately 1/10 the erythema.

Numerous experimentors since Heinecke in 1903 first demonstrated the exceptional sensitiveness of lymphocytes to the roentgen rays and radium, have proved conclusively that the disintegration of lymphocytes begins with 15 minutes after the exposure to the rays, that the cellular disintegration continues for several days and that the lymphocytes in the circulating blood are equally sensitive to irradiation and are also destroyed in large numbers.

Desjardins sums up as follows the most probable mode of action of the roentgen rays on inflammatory conditions:

"It can be assumed that the leukocytes, and especially the lymphocytes, which the organism mobilizes around the site of infection, represent an effort to localize the infection and to get rid of the infectious material by phagocytosis or otherwise, it must also be assumed that the infiltrating cells contain or elaborate within themselves the protective substances or other means which enable them to destroy or neutralize the bacterial or other toxic products which give rise to the defensive inflammation. If these assumptions are well founded, it seems not unreasonable to deduce that irradiation, by destroying the infiltrating lymphocytes, causes the protective substances contained in such cells to be liberated and to be made even more readily available for defensive purposes than they were in the intact cells. There can be little question that the rays act by destroying the infiltrating leukocytes and that the value of radiotherapy depends chiefly on such action. In favor of this view are the points already mentioned; namely, that the rapidity of recession of irradiated inflammatory lesions corresponds to the rate at which normal lymphocytes are known to be influenced by exposure to the rays, and that a small or moderate dose of irradiation is sufficient or even preferable to a large dose. Other circumstances pointing in the same direction are that radiotherapy is most beneficial during the infiltrative stage and less beneficial during the suppurative stage (even then some benefit may be derived) of the inflammatory process, and that, although many such lesions respond rapidly to treatment of this kind, some respond less rapidly or do not respond at all. In connection with the last point, variation in the degree of leukocytic infiltration of different lesions of the same character or of similar lesions of different character is a well known pathologic fact. Therefore, the degree of leukocytic infiltration must influence the action of the rays, because the rays can

destroy lymphocytes only in proportion to the number of such cells. This is undoubtedly related to and probably explains the fact that, while many inflammatory lesions are influenced favorably by irradiation, some react much less or fail to show any reaction."

DISCUSSION.

Dr. L. A. Fortier (New Orleans): I wish to commend Dr. Granger's paper very highly. I think it is very timely and very well written.

Roentgen-ray therapy has been used almost from the time of the discovery of roentgen rays. The treatment is very logical in that roentgen rays affect leukocytes quicker than they do any other cells of the body. Therefore, it should be very useful in the treatment of infection.

My experience has been with the use of a little larger doses of roentgen ray than Dr. Granger gives, however staying well below that of an erythema dose.

The results are very good in tuberculosis, which is a more chronic infection of course. Carbuncles and various other acute infections have been treated by me with success.

Dr. C. P. Rutledge (Shreveport): I want to thank Dr. Granger for presenting this subject because I feel it is of benefit to the general practitioner, and my past experience leads me to believe it is not generally known that roentgen ray is of value in the treatment of acute or chronic infection, especially acute infection.

I have had quite a little experience with it in the last five to ten years, in the last five years especially. We haven't a stabilized dose throughout the country in the treatment of these conditions, nor do I believe we will be able to get a stabilized dose because every condition does not demand the same dose nor the same type of ray.

Recently I have been getting better results in the use of the so-called deep roentgen ray. Only last week I was talking with a surgeon, and he said, "I have an awfully bad case of a patient with erysipelas. I don't know what we are going to do. Those cases are quite frequently fatal. I am going to give the erysipelas serum or antitoxin."

I said, "Did you know that in about seventy-five per cent of those cases roentgen ray is almost a specific?"

He said, "No, I didn't know."

I said, "It can't do any harm and we have gotten results right here in this institution year after year with the same type of case, and I would recommend that we try it anyway."

I gave that patient a twenty per cent erythema dose using the deep ray. Shortly before the treatment was given her temperature was around 102°. Within a few hours after treatment it went up

to 104°, which it often does following the roentgen ray treatment, but within eight or ten hours she was free of all pain and the temperature dropped down to 100° and never reached 100° again. I saw her before I left and she was comfortable and never had another rise of temperature.

We get the same results in carbuncles and furuncles, and we feel that it is a better procedure than to resort to major operations. The analgesic effect is really very, very marked. I have seen them within four to eight hours get complete relief from pain. I have had patients come in that were taking anywhere from a half to two and one-half grains of morphin a day, and within twenty-four hours they discontinued the morphin and never had to use it again. That is not true in every case but it is certainly true in a large per cent of them. Even though we give roentgen ray there is no contraindication for the surgery later, and so often it can of course prevent the surgery entirely. Of course soon after irradiation when we get a softening, then surgery is indicated to open up and drain that pus. The two agents used in conjunction and we are not fighting each other in any sense of the word.

With furuncle especially on a hairy surface, I don't know of any better agent than roentgen rays. In the axilla we have beautiful results. Of course it causes depilation which takes place weeks after, but you and I have seen cases that extend over a long period of time, and depilation itself prevents quite a few of those recurrences.

Dr. A. Jerome Thomas (Shreveport): I wish to compliment my former classmate and instructor in radiology, Dr. Granger, for the presentation of this important subject before the profession, as the majority are not familiar with the uses of the roentgen ray other than for diagnostic purposes.

Stressing his paper, I wish to call your attention to a few things. The roentgen ray equipment when operating efficiently and correctly controlled has a wide field of usefulness. By proper manipulation of the various radiologic factors, there are two kinds of energy produced. One type of energy has photographic properties. The other type has biologic properties which are subdivided into substimulative, stimulative, analgesic, and finally destructive properties, which may be partial or total destruction of tissue.

For almost all kinds of inflammatory lesions roentgen ray irradiations or treatment will give satisfactory results unless you have pus production without any drainage. In such cases surgical drainage is indicated and not roentgen ray therapy.

Roentgen ray treatment can be expected to assist nature in producing absorption of exudates,

diminishing the local tissue congestion, and will also promote shrinkage or atrophy of tissue. It also relieves the pain. If the dosage is properly controlled it will not do any harm in case of failure to give relief.

Analgesic properties: The best results are obtained in neuritis or neuralgia when the affected nerve passes through a bony canal, such as the cranial or spinal foramen. It is necessary to irradiate the nerve ganglia as well as the peripheral distribution of the nerve in order to obtain satisfactory results. Excellent results are due to the absorption of any perineural infiltration or swelling or destruction of any neoplasm of the nerve. This is obtained mostly in the resistive cases, and I wish some of you would refer them to your radiologist for treatment, neuritis, sciatic neuritis, and tri-facial neuralgia in which it is necessary to irradiate the gasserian ganglion, as well as its distribution such as the ophthalmic and the inferior and submaxillary divisions.

I have in mind a case that had been operated twenty times, and had injections fifteen times, and was a morphin addict as a result of the pain for which massive doses were necessary to give him any relief. He was referred to me and I irradiated the gasserian ganglion about at this point, and later he was complaining mostly of pain in the infra-orbital region. I irradiated that, and that stopped, and then it came around into the superior maxillary branch or division. I irradiated there, and finally it got down into the mandible or dental branch, and the man's morphin was cut down to almost zero after irradiation. I think if he had continued the treatment we would have gotten a cure.

Great care is necessary in roentgen ray treatments of the testicle for obvious reasons. The same applies to irradiation of the kidneys. It is all right and it is practiced almost universally by radiotherapists to treat one kidney, but if both kidneys are involved I think the treatment is contraindicated for the reason that the type of tissue that the suprarenal capsule is composed of has very little resistance to roentgen ray energy and may be destroyed resulting in asthenia and low blood pressure. I don't think the patient will live long, with both suprarenal capsules destroyed.

Testicles may be destroyed or function impaired. These tissues also have little resistance to roentgen ray energy.

Dr. Monte Meyer (New Orleans): I want to confirm what Dr. Granger has said about the use of small doses in mastoid involvement. It does relieve pain and shortens the duration of the drainage.

It has been my practice to have the roentgenologist give two or three exposures of the same dosage, instead of one, over each ear. I have

found in any number of cases that by having them rayed every other day you will often bring them to a safe conclusion without any operative interference.

Dr. M. P. Boebinger (New Orleans): I wish to recall an experience I had some few years ago in a mastoid case. I did not see the case originally, but the case was a child of nine months. The diagnosis was acute suppurative otitis media, later with a complication of acute mastoiditis. The child of a very good friend of mine, a dentist by profession. I did not treat the child, but the child was taken to a dentist radiologist and the dentist proceeded to treat the mastoid and middle ear with roentgen ray exposure. I understand this treatment continued from more than a year, and all the while the roentgen ray dentist promised a cure.

Finally I was consulted, and the only thing to do, of course, was a mastoidectomy. The child was then nine months of age. At the age of nine I was consulted again for a similar condition, the same side. We did a mastoid, my own operation.

I have reported four cases on the subject, in which I do a simple mastoid. For the need of a radical operation is carried up further. A straight line is made to the middle ear exposing the mastoid antrum. A tube of gold is made with a cross section and through this cross section threads are made and at the hump of the needle I also have some threads to fit in this. This is placed in the middle ear and the middle ear then is treated as an open wound.

We irrigated this child first with normal saline through the tube and then finally decided that the better plan would be to use increasing strengths of grain alcohol. We started with ten per cent, then increased to twenty-five per cent, and finally found our best results were with the fifty per cent.

I did not wish to bring this particular point out. I merely wanted to say that the use of the roentgen ray should of course not be taught or preached as a panacea in the treatment of mastoids, but when it is necessary to apply surgical interference I think it is necessary to get in and get in fast and not temporize.

Dr. J. R. Fernandez (Wallace, La.): Dr. Grangers' paper is very interesting from the standpoint of the mastoid. He brought out in his paper the fact that mastoids in babies have a tendency to clear up, cease draining, and the process has a tendency to stop upon application of roentgen ray.

A mastoid is a very serious proposition, and it occurs to me that this new plan of treatment is more important from the standpoint of aborting mastoids than for curing them. Mastoidectomy is

a very serious proposition. It is a dangerous affair, and when you recall the after results, the remote effects, of mastoiditis it appears to us that a treatment whereby you may use roentgen ray in the hope of aborting these cases is a very grateful thing.

We all known that tympanotomies and intranasal treatments did not abort mastoids. I brought that out very clearly in a paper I read last year. After repeated tympanotomies the mastoiditis went on the same as if nothing had been done. I suggest this as a very good plan of treatment in an effort to abort mastoids.

Dr. Amedee Granger (closing): It was very gratifying indeed to hear three prominent otolaryngologists approve my recommendation to use the roentgen ray in the treatment of mastoiditis. Dr. Boebinger seemingly only didn't concur in this opinion, but as a matter of fact the case he reports shows clearly that the treatment had been improperly administered, and by a dentist.

Please let me state again that in these cases I would not recommend the use of the rays even for their abortive property without a careful radiographic check-up each time a treatment is given, or at least once a week. Had the dentist done this he would have recognized the breaking down, had he known of course how to read the mastoid radiographs, Dr. Boebinger would have been called in much earlier and the child would not have been treated uselessly and at the risk of grave complications over a period of months.

Whenever our sign of massive destruction or breaking down shows up on the radiograph roentgen ray treatment should be discontinued because the case is then clearly an operative one.

As to the larger doses of the roentgen ray mentioned by some of the discussants, I believe that it is better and safer to use the smaller doses since it may have to be repeated several times if for no other reason than to make check up radiographs and repeated larger doses (50 per cent of an erythema dose) would probably result in burns. We don't expect to cure a mastoiditis that has already broken down, and therefore recommend surgical treatment at once for these cases.

In other inflammatory conditions with distinct signs of softening and pus, drainage must be provided and this should be done before the roentgen ray treatments are begun. In a carbuncle, for instance, you should unquestionably not make the large incision formerly done when you resorted to surgery alone, but an incision through the broken down tissue for drainage, and then irradiate it. If the irradiation is not successful, a possibility which I doubt seriously, a more radical surgical treatment can be done later.

THE CLINICAL AND SOCIAL ASPECTS OF VULVOVAGINITIS IN CHILDREN, WITH AN OUTLINE OF A SPECIAL METHOD OF TREATMENT.*

J. THORNWELL WITHERSPOON, M. D.†

NEW ORLEANS.

It is generally recognized that the gonorrheal vulvovaginitis of childhood is a serious hospital problem, so serious a one, in fact, that no precautions should be omitted that can guard against its occurrence. The chief preventive measure is the isolation in a reception ward of every female child who is admitted to the institution until at least three or four vaginal smears, taken over a period of as many days, are reported as negative. This temporary isolation of all new patients is the keynote of prophylaxis against ward epidemics of vulvovaginitis, and the hospital which does not observe this simple precaution is likely to pay the penalty for its neglect, for even with the most careful watching, an occasional infected patient is admitted, and the results are always more or less disastrous.

Even a small epidemic of vulvovaginitis can cause a hospital much inconvenience and expense. The strictest isolation of the infected children is necessary; they must be segregated in a special ward, and, no matter how well they may be otherwise, they must be kept in bed, for isolation under any other circumstances is not possible. The size of the nursing staff depends upon the number of patients involved; in addition to the general nursing care which bed patients require, an elaborate routine of local treatment must be carried out, and the most competent of nurses cannot adequately care for more than four or five such children. Moreover, to prevent the

spread of the disease to other wards, the nurses must be isolated almost as strictly as the patients. The maintenance of such a service, aside from the disturbance it causes in the hospital administration, may be a matter of considerable expense, and even a small outbreak of the disease can produce all of these undesirable sequences.

In the spring of 1931 an epidemic of vulvovaginitis occurred at Touro Infirmary in New Orleans, which, though it involved only nine patients, necessitated the maintenance of an isolation ward for them for a period of two months, as well as after-treatment in the clinic, for some of the children, at least, for more than eight months. Nine patients is a small number upon which to base conclusions, and this paper is presented not so much to report an epidemic as to emphasize the disturbance which even so small a number of cases can cause in a hospital, as well as to outline a method of treatment for the disease, and to consider some of the problems, social as well as clinical, which gonorrheal vulvovaginitis exhibits.

The age of the patients ranged from six months to eight years, the average being something over five years. Because of the method of treatment employed, chiefly vaginal irrigations and applications, the youth of the children is of considerable importance; very young patients have correspondingly small vaginal orifices, for which reason irrigations and local applications are decidedly more difficult and obviously less effective than they are in older girls.

The source of the epidemic, while not entirely clear, can probably be traced to a seven-year-old girl who had been on the ward four months previously for masturbation, and who at that admission was found to have a positive vaginal smear. She was discharged before her vaginitis was cured, and when she was subsequently readmitted, because of the continued masturbation, she again exhibited a positive

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smear, which was one of the earliest found in this group of cases.

The diagnosis of the disease was made in each case on the clinical evidence of the purulent discharge and on the microscopic evidence of the vaginal smears in which gram-negative intracellular diplococci were found. In order that the observations should be uniform, all of the smears were secured, stained and examined by the same technician.

Adult women who exhibit a gonorrheal infection of the external genitalia exhibit also in a large percentage of cases an extension of the disease to the upper genital tract in the form of salpingitis, pelvic peritonitis and pelvic abscesses. Such an extension is rarely seen in children, and no such complications were noted in this group of cases. The urethritis so frequently found in adult women was also notably absent.

Why children should exhibit vulvovaginitis in an epidemic form, as adults never do, and yet remain free from the complications which adults so frequently develop, is a very interesting speculation, the answer to which is not yet clear. The absence of pubic hair, the slight vaginal secretion, the undeveloped labia and cervical glands, and the sensitive vaginal mucosa of the young female perhaps play some part in the spread of the disease, whereas the pubic hair, the more profuse vaginal secretion and the less sensitive vaginal mucosa possibly serve as protective elements in the adult. The absence of menstruation and the closed cervical os undoubtedly account for the rarity of upward extension in the vulvovaginitis of childhood, for similarly few complications are noted in the woman past the menopause and infected for the first time. In the woman in the functional years, on the other hand, the cervical canal is always patulous during menstruation, and the infection can therefore pass directly into the tubes by way of the endometrium, with

resulting complications of many varieties and types.

All of the patients were treated with a 5 per cent mercurochrome solution, which is non-irritating, an important consideration in dealing with children, whose tissues are easily injured, and the only disadvantage of which is the marked staining of the bed clothes. It might be added that Williams of Iowa reports better results with this agent than with argyrol in a 40 per cent solution, and better results with the 5 per cent solution of mercurochrome than with the same drug in a 2 per cent solution or in a 2 per cent jelly.

The routine of treatment, in addition to a full daily bath, included local treatment given three times a day. After a thorough cleansing of the vulva with soap and water, the vagina was irrigated through a small catheter with 1:5,000 potassium permanganate. Ten c.c. of a 5 per cent solution of mercurochrome was then instilled into the vagina through the same catheter, the fluid being forced in under pressure by a syringe, and the labia being held firmly together during the process. Instillation under pressure is essential, for, if the vagina is not completely distended, the antiseptic cannot penetrate into all of the crevices of the mucosa.

In extremely persistent discharges that did not clear up under the instillation treatment just outlined, the cervix was considered to be the source of infection. In such cases, in addition to the usual treatment, the patient was placed in the knee-chest or Sims position and the mercurochrome solution was applied directly to the cervix, which was exposed through a Kelly cystoscope, with the aid of a head mirror.

Extreme care and gentleness must be employed in the initial irrigations, so that the child's confidence is gained as early as possible; cooperation is a very essential element in the success of any treatment, and it is particularly important when one

is dealing with young children. We found that it was sometimes helpful to permit the newly admitted child to watch the treatment of an older child or of a child who had been longer on the ward, so that she would have less fear when her own turn came. With one exception all of the patients, after the first day or two, cooperated exceedingly well with us.

The criteria of cure were set down as freedom from discharge clinically, and two consecutive negative smears, taken at weekly intervals, while the patient was still under treatment. Without doubt we should have insisted on a third negative smear a week after treatment had been discontinued, and while the patient was still in the hospital, but this would have meant an extra expense to the institution which did not seem justified, and the third smear was therefore taken in the outpatient clinic.

Before the child was discharged, the mother was given careful instructions in the treatment to be carried out at home, the routine including a daily bath, cleansing of the vulva three times a day, and instillation into the vagina twice a day of several c.c. of a 5 per cent mercurochrome solution. The chief point to be emphasized in the instruction given the mother is the necessity for the actual demonstration of the treatment; she must be shown how to spread the labia apart with one hand in order to find the vaginal orifice, while with the other hand she inserts the tip of the medicine dropper into the opening. Mere description of the process is not sufficient; actual demonstration is necessary, particularly if the child is small and the vaginal orifice is not easy to identify. It is important also to point out to the mother that the buttocks must be kept elevated for a few moments after each treatment, to make certain that the drug reaches the uppermost parts of the vagina.

The average length of stay in the hospital was three weeks, the limits being two and six weeks. This is a shorter period of hospitalization than is noted in the usual

epidemic, and the explanation is that opportunity was afforded of continuing treatment in the outpatient clinic. In most cases the results of treatment were gratifyingly prompt. Only two patients exhibited persistent discharges and continued positive smears, but both finally left the hospital apparently cured. One of these patients was a six-months old child, in whom the chronicity of the disease can be easily explained by the small size of the vaginal orifice, which made the irrigations difficult and lessened their effectiveness. In the other instance, the persistence of the infection was due entirely to lack of cooperation; only after four weeks of treatment did the child finally submit to the irrigations without resistance.

In seven of the nine patients who have returned to the clinic during a follow-up of seven months only two recurrences have been noted. The other five children have shown no discharge clinically, and repeated smears taken after the cessation of treatment have been negative. One of these recurrences was noted in the six-months old child, who has already been said to have had a very persistent discharge while in the hospital. The other was in the patient who was considered as the possible origin of the epidemic. This child was seven years old and had practiced masturbation for the past several years. She was free from discharge clinically before she left the hospital, but she continued to abuse herself at home according to her mother's story, in spite of every effort to break her of the habit. The circumstances were obviously unfavorable for a permanent cure of the infection, yet weekly investigation in the clinic showed no evidence of recurrence, clinically or microscopically, until three months after her discharge.

The social aspect of gonorrheal vaginitis is well illustrated by this patient. She and two sisters, all of them under eight years of age, live in the same room; the other children are exposed to the infection, but for some reason have so far escaped it.

The mother attempts to administer to the patient the treatment we have advised, in addition to doing all the work of the home and earning a small living by taking in washing. Surely under such conditions effective treatment is only an ideal, and the disposition of the child therefore becomes a problem. Should she be left in the house with her young sisters, where she is an obvious source of infection? Even more important, since a larger number of children are involved, should she be allowed to return to her studies, taking her disease into the school with her?

The mother's solution of the problem would be to place the child again in the hospital, which would relieve her of the extra work and responsibility, and from her point of view that solution is simple. But from the hospital's point of view the situation is decidedly more complex, for her re-admission would necessitate the opening of an isolation ward for her, with separate day and night nursing care, and the expense of providing such facilities cannot be lightly ignored. What to do with such children as this is a very serious question, from both the family and the social points of view, and it is hard to say whether the responsibility should be placed upon the home, the medical or the social service department of the hospital, or the state board of health. Categorical statements are plainly impossible, and each case must be handled on its own merits.

We had hoped to be able to compare our clinic and hospital cases, with special reference to the type of treatment, the length of time necessary for a cure, the complications and the recurrences, but the number of clinic cases so far handled is too small to warrant the comparison. We are satisfied, however, that the type of treatment we advise in the outpatient clinic is entirely practical, and it might be well to emphasize again that it includes a daily bath, vulvar cleansing three times a day, and instillations of mercurochrome solution into the vagina twice a day, and that the most

important point in the instruction given to the mother is the actual demonstration to her of the method of identifying the vaginal orifice.

This group of patients will be reported on again after they have passed the age of puberty and menstruation has begun, with the idea of determining whether or not the vulvovaginitis of childhood is responsible for any of the gynecologic problems of adult life.

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Note.—I am indebted to Dr. L. R. DeBuys, Chief of the Department of Pediatrics of Touro Infirmary, and to Dr. C. Jeff Miller, Chief of the Department of Gynecology of the same institution, for the privilege of making this report.

DISCUSSION.

Dr. C. Jeff Miller: I am particularly interested in Dr. Witherspoon's paper, both because he treated these cases on my service at Touro Infirmary and because it was at my suggestion that he reported the series. I am sorry that Dr. Hume is not present tonight, because I have handled more than one epidemic of this kind with him, and I am sure he would have something valuable to say.

Dr. Witherspoon is quite correct in emphasizing the importance of laboratory work in the management of these cases. Clinically the diagnosis may seem perfectly clear, but we have no right to assume that the disease is gonorrheal in origin until we can prove the point microscopically, and that frequently requires patient and persistent effort; it by no means follows that one examination will reveal the offending organism. For the same reason, repeated tests are necessary before a cure is pronounced.

The type of antiseptic used must be selected with great care, especially in children, who are easily terrified and who do not endure discomfort well. The safest plan is to begin with mild solutions and to increase the strength as the tissues become increasingly tolerant. While I have not handled a large series of cases since the introduction of mercurochrome as a popular agent, I have treated several patients by the method which Dr. Witherspoon advises, and have found it very satisfactory except for the practical objection that it stains the linen that comes in contact with it to a hopeless degree. The treatment which has been outlined in this paper and which includes vaginal irrigations of potassium permanganate and direct applications of the mercurochrome solution is more effective than the use

of mercurochrome and similar agents in the form of jelly, though I must grant that I have had several very striking results by the latter plan.

Another important consideration is the management of persistent cases, in which the discharge remains intractable to the usual method of treatment. In these circumstances the cervix is generally infected also, and must be treated directly. The vaginal portion of the cervix, fortunately, is more frequently involved than the endocervix, and the application of the proper antiseptics through a Kelly cystoscope, with the child in the Sims or knee chest position, is usually effective.

The management of these cases in the home is a very practical consideration. Hospitalization is ideal from many standpoints, but it is not always practical, and one must take expediency into account. If the co-operation of the mother is secured, there is no reason why the plan of treatment which Dr. Witherspoon has suggested should not be carried out with excellent results, but cooperation is the keynote of success.

Finally, the chronicity of this disease should be commented on. It is my own opinion that this feature of vulvovaginitis has much to do with the explanation of the type of cervicitis we so frequently see in young virgins and for which no obvious cause can be found. In such cases it is always well to go into the previous history and inquire as to possible infections of childhood, though such infection, of course, are so mild as to pass unnoted and we can secure no facts to substantiate our theory. More than one physician has commented on the frequency with which chronic gonorrheal infections of the vulva and vagina undergo a spontaneous cure at the time of puberty, and has pointed out that the normal changes which occur at this time, particularly the changes in the vaginal epithelium and the vulvar structures, may explain the disappearance of the vulvovaginitis which has hitherto proved so refractory to treatment.

Dr. Crawford (New Orleans): I am very much interested in Dr. Witherspoon's paper and his plan of treatment of vaginitis. Vaginitis gives a great deal of trouble in institutions where many little girls are kept in one room or ward. He speaks of the expense and difficulty of curing this infection in the hospital but it is almost impossible to cure it in an institution where isolation is practically impossible. We have just gone through with an epidemic of it in The Protestant Home for Babies on Eighth Street. There are about 30 children kept there. Every girl has a vaginal smear made when she is admitted and she is kept in isolation for two weeks after admission. If there is any discharge during that time a second smear is made. In spite of this

precaution this past year we had vaginitis in one girl, and then in eight others.

It is a difficult thing to carry out treatment there for we have only one trained nurse and six helpers to look after the children. There is no hospital in the city willing to accept these cases because of the time required for the treatment and because of the expense of isolation. We sent our first case to Charity Hospital but that hospital has no ward for such cases. It, however, accepted our patient for us, but had to put her in ward 48. She was returned to us in three weeks with the discharge temporarily stopped but she brought chicken pox back to the Home with her.

These infected children in our home we had sleep in a room to themselves but they had to play with the other children. We douched them once a day with mercurochrome, and after the douche, diapers were put on all of them and they went out to play with the others. We had nine cases, 5 of them were removed from the Home, 3 of them have had no discharge for 4 or 5 months and negative smears, one has occasional discharge and a positive smear. If the city had one ward for the treatment of these cases it would be a great help to the orphan asylums.

Dr. Meyer (New Orleans): I should like to ask if you used any foreign proteins in the treatment of these cases?

It is surprising how very few eye infection (gonorrheal ophthalmia) occur in these epidemics. At one time in Charity Hospital we had thirty children in one ward with vulvovaginitis and despite the fact there was only one nurse in charge with practically no isolation and the children touching their own eyes, there was no infection.

I have only seen one case of eye infection in such cases. In all gonorrheal ophthalmia we eye men use injections of foreign proteins routinely and have not only saved eyes from destruction, but also shortened the time of infection.

Dr. Witherspoon (closing). In answer to Dr. Meyer's question, we did not use any foreign proteins at all. The only reference I can give to their use in this infection is Williams, of Iowa, who had 42 cases and used foreign protein in some of his cases without beneficial results.

Dr. Crawford brought up a major point, the chronicity of the disease. When we see an epidemic of vulvovaginitis in children it stays one, two, or three months—you cannot get rid of it.

Possibly, if the hospitals would make admission to the children's ward more strict, maybe take a vaginal smear every day, keeping the children until admitted in separate wards for four or five days, this safe-guard against any outbreak might save a good deal of expense.

SOME CLINICAL CONCEPTS OF HEART FAILURE.*

SIDNEY M. COPLAND, M. D.

NEW ORLEANS.

For many years the diagnosis of congestive heart failure was respected as being an exact one. Later, we regarded it as a more or less blanket diagnosis and refined our observation so as to claim the failure as being either of right or left sided origin. This latter classification has been written of at great length during the late years but Osler described it quite completely some years ago. Now, I have no fault to find with this classification except that it is an anatomical description rather than clinical. However, even in this day and time, many clinicians content themselves with the antiquated blanket diagnosis of congestive heart failure. It is true that heart failure is congestive, but since several distinct clinical pictures may result, why not be more specific and state whether the right or left heart plays the major role. This differentiation is more than a mere academic one for etiology, prognosis, and therapy vary in the two types. Since this is true, no other reason need be given in order to cause one to be more exacting in his diagnosis.

For the benefit of thoroughness, I shall superficially review the gross pathological physiology of so-called congestive heart failure. The heart is a pear-shaped muscular pump, moving blood through two separate circuits—one through the lungs and the other through the remainder of the body. For this reason the heart is divided into halves, the right and left. Since the left half drives blood into a larger field and against a greater resistance, it is of heavier construction than the right, being twice as thick. Now this pump is situated mid-way in its circuit, and if it fails, stasis occurs in front as well as behind. This is

very important to remember, for only by this conception can all of the symptoms be explained. The two halves must work harmoniously, having a new blood load ready as soon as one is discharged. For this reason auricles are present and act as reservoirs. There is no doubt that the ventricles play the major role in cardiac failure, for even when the most serious of auricular malfunctions, auricular fibrillation, is present the heart's efficiency towards maintaining a capable peripheral circulation is not impaired providing the ventricles are intact. The pump is separated from its reservoir, the auricles, by wonderful efficient valves. If the right ventricle throws out one more drop of blood per beat than the left ventricle discharges, the lungs would be overdistended in a very few minutes. Also, to maintain efficiency, the auricles must empty into the ventricles at the exact moment required. These various maneuvers are governed by a system comparable to a telegraphic line—namely, the cardiac conduction system composed of specialized nervous tissue.

From this brief survey one can readily picture a dysfunction wherein one side of the heart predominates. However, both sides will be involved eventually. Now if the right ventricle fails the blood is dammed back into the right auricle, great venous vessels and viscera. The symptoms caused by the visceral congestion are the ones which form the syndrome and for this reason visceral failure is the most appropriate term descriptive of such a state.

Case 1.—Mr. W. S., a white male of 60 years, with a chief complaint of generalized edema, first noticed swelling of his feet three months ago. Several weeks later the abdomen began to swell. At this time the patient was nauseated and began to vomit at irregular intervals. Physical examination revealed an enlarged heart to right and left, apical systolic murmur not transmitted, coarse rales at the bases of the lungs and generalized edema and ascites. B. P. 160/120. Electrocardiogram showed evidence of myocardial disease and right ventricular preponderance. Patient went steadily downhill and died twenty days after being first seen. Autopsy—heart

*Read Before the Orleans Parish Medical Society, October 12, 1931.

showed left ventricular hypertrophy and right ventricular dilatation. Visceral organs congested. Peritonitis.

Again, if the left half fails, the brunt of the insufficiency is borne by the lungs and peripheral arterial areas. One of the earliest areas to manifest ischemic symptoms is the brain and medulla. Hence, clinically we may term left ventricular failure as pulmonary cerebral failure.

Case 2.—Mr. F. Z., a white male, aged 64 years, with arterio-sclerotic heart disease, was observed over a year's period. The heart was huge, the apex being in the seventh interspace at the anterior axillary line. A loud harsh to and fro murmur was present at the apex. Marked peripheral sclerosis. B. P. 140/80. At no time was edema present. During the last month of life the patient suffered almost nightly an attack of cardiac asthma. He also had delusions and hallucinations during the last few weeks of life. Reasoning back we find the patient died a left ventricular death and can classify the etiology as being one of a small group.

The etiology of congestive heart failure has long been known despite its multiplicity of origins. When one but analyses what portions of the heart per se are involved in the various circulatory diseases, it at once appears simple to predict whether pulmonary-cerebral or visceral failure will occur. The right heart bears the burden in mitral disease, usually a result of rheumatic fever and therefore one would expect a visceral congestive failure as the terminal outcome. Such is really the case. General myocarditis, adhesive pericarditis, chronic pulmonary fibroid diseases, pulmonary emphysema, thoracic deformity and pregnancy all throw the brunt of their attack on the right side and visceral congestive failure is the prevailing clinical picture.

Luetic vascular disease attacks the aortic valves and the ascending aorta. Here, the left ventricle is the victim and if compensation fails pulmonary-cerebral symptoms will be evident. Hypertension throws its load on the left ventricle which hypertrophies. If the load is too great congestion occurs in the lungs and anemia in the cerebrum causing pulmonary-cerebral fail-

ure. Coronary disease, especially thrombosis, may affect either ventricle but since it is the left anterior descending branch which is most often the seat of pathology, the left ventricle is the portion usually embarrassed and again if the embarrassment is severe enough, pulmonary-cerebral symptoms occur. Myocarditis may affect the left ventricle with similar end results. The conclusions drawn from a discussion of etiology is that if one but reasons back he may determine the etiological group merely from recognizing the clinical picture.

The symptoms of visceral heart failure occur in all degrees of intensity and may be as difficult to diagnose at times as it is simple to detect at other intervals. The onset of visceral failure is gradual and the cause is remittent. The attacks become more frequent with time and the duration of periods of apparent good health correspondingly diminish. The reason the cause is remittent is that danger signals are given early and the patient will temporarily slow his activities, only to overstep the bounds of caution at a later date. The explanation of the early danger signal is that the right ventricle is only one-half as thick as the left and the zone between efficiency and inefficiency is a narrow one, hence the early signs. The onset varies, being either mild or severe. The one viscus which causes most prominent distress signals is the liver. This is manifested by dyspepsia, epigastric and hypochondrial tenderness, fullness, bloatedness and malaise. These gastro-intestinal symptoms often confuse the patient to such an extent that he thinks he has a gastro-intestinal disorder. It is of cardinal importance to make an early diagnosis in such a situation for much can be accomplished for the patient during the early period. Later, pain may be experienced in the right hypochondrium and is due to a distension of Glisson's capsule caused by the congestion. This hepatic congestion may exist for months or years and a fibrosis eventually results causing a

true cardiac cirrhosis of the liver. Such a liver is not tender.

The kidneys play a prominent part in the symptom complex. Early there is a diminution of urine. This is so definite that one may deduce if a known cardiac shows a sudden decrease in urinary output that visceral congestive failure is looming up on the horizon. Edema does not have to be present to make this diagnosis.

The spleen is not enlarged to any great extent. When it is palpated as a large tender mass, examine the patient carefully for the possibility of a sub-acute bacterial endocarditis.

The systemic veins are enlarged. The cervical group are the most prominent but no one group can be definitely specified.

The symptoms which have received the most notice are edema and ascites. They are late symptoms. Edema of cardiac origin is derived from two sources, namely, failure of the pump and a derangement of the vascular bed. The pump's failure causes stasis which in turn affects cellular metabolism including those cells forming the walls of blood and lymphatic channels. Ascites and hydrothorax are produced by the same mechanism.

Cyanosis is due to the accumulation of CO_2 in the blood and is a manifestation of a gaseous poisoning.

Left heart failure of the pulmonary-cerebral type is usually in older individuals, for the etiological factors of this type of failure are usually diseases of adults. Now for this reason one expects a more or less continuous course for the reserve of the individual is lower. Also, since the left ventricle is twice as thick as the right, pathology is rather far advanced when the first symptoms of pulmonary-cerebral failure occur. The onset of this form of failure is invariably sudden and assumes either the pulmonary or cerebral style or both. The immediate effects of left ventricular failure is two-fold:

1. Pulmonary congestion which is

severe. Soon the plasma of the static blood seeps through into the alveoli and pulmonary edema occurs. Since much of the space for aeration is suddenly obliterated the patient suffers an acute, terrible, violent air hunger with coughing. Serum, fluid and air is mixed in the lung and when expectorated appears as a frothy, soap-bubble like sputum.

Lesser degrees of pulmonary involvement may appear as a chronic bronchitis due to a chronic congestion of the bronchi.

It is this type of cough that yields to digitalis.

Mac Kenzie pointed out that early left heart failure may produce crepitant rales at the bases of the lung.

2. The other great syndrome in this phase of failure is the cerebral. The most susceptible tissue in the body is the nervous system. When the left heart fails a cerebral anemia occurs and is represented clinically by headache, vertigo, as early signs. Later, the so-called cardiac asthma results. It is also termed nocturnal dyspnea. Its mechanism is as follows: Let us assume that the patient has a heart whose efficiency allows him to just get by. When the patient falls asleep there is a fall in blood pressure and pulse rate for these are the physiological companions of sleep. This fall in blood pressure causes cerebral anemia. Also the assumption of the dorsal position places the abdominal contents against the diaphragm, limiting pulmonary aeration and conducive to congestion. Carbon dioxide accumulates in the blood stream and the respiratory center in the medulla is stimulated. The patient attempts to breathe but since the lungs are congested there is not much of a response to the respiratory stimulus. Cardiac asthma is now present. The patient will remain in such a state for a varying length of time and will then recover spontaneously or die. Cheyne-Stokes breathing is another clinical manifestation of the same pathological process. Here the respiratory center is

stimulated by an accumulation of carbon dioxide and the lung responds. However, so vigorous is the lung's response that the oxygen deficiency is over-compensated, causing apnea, which in turn is followed by another period of hypernea due to a re-accumulation of carbon dioxide during the period of apnea.

From this brief survey we see that left ventricular failure causes pulmonary or cerebral symptoms.

The prognosis of either variety of heart failure is most serious. However, it does not mean the patient is necessarily doomed for an early exit. To the contrary, the patient very often lives an active life after a period of decompensation. Pulmonary-cerebral failure is the most serious type and bears a most guarded prognosis. Naturally, the comeback of such a heart is relatively small because pathology is far advanced when the earliest symptoms present themselves. Visceral failure bears a more pleasant prognosis for its victims are often young individuals. The mixed type of visceral-pulmonary-cerebral failure is the most fatal of all and an early death may be expected.

DISCUSSION

Dr. I. I. Lemann, (New Orleans).—In his brief paper, Dr. Copland has very cleverly packed many stimulating concepts of old and well recognized facts. He has very properly stressed the modern idea of heart disease, namely, that we must base not only our concepts of the conditions existing, but the prognosis and the treatment, upon physiological as well as anatomical and etological considerations.

I think in considering heart failure we have always failed to think of the reservoir from which the right or left pump draws its blood. We have always more or less in the past thought of the area to which the blood was to be pumped and have failed to think of the area from which the blood was to be pumped. We should think of left ventricular failure as the failure of the left ventricle to move the blood from the lungs. Similarly, as Dr. Copland pointed out, on the

right said, we should think not so much of the failure of the right ventricle to forward the blood to the lungs as failure to pump blood from the vascular and the general circulation.

One of the very interesting contributions Dr. Copland has made is the idea of prognosis of the right and left ventricular failure respectively. I think that this thought, not of course original with him but very cleverly and stimulatingly presented, explains the difference in the prognosis of rheumatic and syphilitic heart disease respectively. Dr. Jamison, a few months ago, in this society, spoke to us about the treatment of syphilitic heart disease, particularly aortic regurgitation, and the value of certain forms of treatment. He emphasized at that time the well known fact that when a patient with syphilitic heart disease, particularly aortic regurgitation, has congestive heart failure he is less apt to come back than the patient with mitral disease, and if he does come back he is much more likely to slip back into the stage of congestive heart failure. When the bucket has been to the well a couple of times the patient soon comes to the end. In other words, prognosis of congestive heart failure in syphilitic left sided heart disease, I mean aortic regurgitation rather than mitral regurgitation, is of very much more serious import than heart failure following mitral stenosis or regurgitation. I think that this is a very important fact, and I am very glad that Dr. Copland has stressed it tonight. I think he has very properly stressed recognition of other signs of right and left heart failure, and particularly of left heart failure, because as he has already suggested right heart failure occurs more quickly and is more easily recognized, whereas left heart failure as indicated by dyspnea is more likely to be overlooked.

I think we are all interested in these discussions of old topics presented in new and stimulating fashion and I think we can from time to time have them with great profit.

Dr. Copland (closing): The dyspnea of heart disease whether due to an accumulation of CO₂ or to a diminished amount of blood flowing to the medulla, produce the same end result; namely lack of oxygenation with an ensuing hyperstimulation of the respiratory center.

Prognosis is important and can easily be misinterpreted. I remember seeing one chap playing football, who in his childhood had suffered rheumatic fever with mitral heart failure; a very striking example of how far a man can be brought back.

CASE REPORTS AND CLINICAL SUGGESTIONS

SITUS INVERSUS VISCERUM TOTALIS

(REPORT OF A CASE)

LESLIE V. RUSH, M. D.,

and

H. LOWRY RUSH, M. D.

MERIDIAN, MISS.

In April, 1928, two cases of mirror transposition of the viscera were described by us¹. In the first case there was found to be transposition of the abdominal viscera alone (*situs inversus viscerum abdominalis*), in the other a complete transposition of viscera (*situs inversus viscerum totalis*). It is a case of the latter type that we wish to describe here.

An extensive review of the literature in 1928 showed that 319 cases had been recorded. Since that time several other cases have been described in the literature. No doubt an enormous number of cases have been overlooked clinically and a very small percentage of those cases observed have been recorded. These considerations, combined with the fact that we have observed three cases of heterotaxy at laparotomy since 1927, have impressed us that mirror transposition of the viscera is not the rare clinical entity it has been previously considered, and it is of vastly more surgical importance than has been formerly believed.

In one of our cases (*abdominalis* type) the left sided appendix was removed with difficulty through a McBurney incision. In the case described below it was found by reviewing hospital records that a complete physical examination had been made in 1928 and no mention of any abnormality was made.

CASE REPORT.

Mrs. A. E., white female, aged 38 years, referred by Dr. T. E. Royals of Meridian, Miss., entered Matty Hersee Hospital Sept. 16, 1930, with a diagnosis of bilateral pyosalpinx. Chief Complaint: Pain over entire lower abdomen. Bleeding from the womb. Present Illness: Pain began with the last menses and had existed with exacerbations and remissions since. Menstruated

last two weeks ago. Three days ago patient began flooding and since that time several large clots had passed through the vagina. There had been some nausea but no vomiting. She had had some fever but did not know how much. Menstruation had always been regular but associated with some pain. There had been a foul odored, creamy discharge for the past several weeks. Past History: Patient had had one previous attack of lower abdominal pain and some burning on urination. It persisted but a few days and after it subsided she had been able to be about the house and perform her duties. She was the mother of two children, aged 8 and 12 years respectively. She was right handed, had not been conscious that the heart was on the right and had suffered no physical handicap because of the transposition. There was no history of twinning in the family and no other members of the family are, to her knowledge, transposed. Physical Examination: The physical examination revealed a well developed, fairly well nourished individual lying in bed. Temperature 100.6 degrees F., pulse 75, respirations 20. The lungs were negative and the heart showed only the abnormality of location, the outer border occupied an area to the right of the sternum instead of to the left. The area of liver dullness was normal except for its location on the left side. The spleen could not be palpated. The abdomen was of the scaphoid type. There was no rigidity, but pressure in either iliac region caused marked pain. Vaginal examination revealed a moderate leucorrhea. The cervix was firm. The uterus was retrodisplaced and fixed. A definite tender mass could be felt to the right of the uterus. Diagnosis: Bilateral salpingo-oophoritis. Operation: Midline incision. The liver and gall bladder were found on the left side of the abdomen. The liver was not enlarged. The gall bladder was thin walled and emptied easily. The appendix and ascending colon were on the left. The appendix was subacutely inflamed. The descending colon and sigmoid were situated on the right side. There was a retrodisplacement of the uterus, an inflammatory mass on either side held it firmly in the cul-de-sac. On the right a large tubo-ovarian abscess was present, the sigmoid colon was firmly embedded in the abscess wall. There was a pyosalpinx and cystic ovary on the left. Appendectomy. Bilateral salpingectomy. Bilateral oophorectomy. Wound closed in layers with one cigarette drain in the cul-de-sac.

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PRIAPISM

(REPORT OF A CASE)

S. F. GANDELMAN, M. D.

ALEXANDRIA, LA.

This paper is presented not only because true priapism is a rare condition but because in this case the priapism was the first presenting symptoms of beginning *tabes dorsalis*. True or essential priapism is a persistent erection of the penis, unaccompanied by voluptuous sensations, usually very painful and remains in "status quo" regardless of coitus and local medication. It seldom responds to any form of treatment but subsides spontaneously very gradually. It does not include priapism due to local irritative causes such as vesical or prostatic, calculus, stricture, chordee, retention of urine, etc.

CASE HISTORY.

A male negro, forty-two years old, awoke in the morning with an apparently normal erection. He had slept alone and had no coitus that night. When the erection failed to recede and it became painful he applied ice cold towels without any relief. Although he had no sexual desire he attempted coitus for relief but the attempted act was too painful and was not completed. Past History: He denied having had a chancre but he had a gonococcal urethritis five years ago. Physical Examination: The facies showed anxiety and suffering. The pupils were round, and equal and reacted sluggishly to light. Patellar reflexes were hyperactive. Romberg's sign was not present, epitrochlear glands were not palpable. The penis was fully erect, lying rigidly against the abdomen and throbbing. It was greatly enlarged, tense and comparable to bone in rigidity. The glans was glistening and greatly distended. The corpora cavernosa were very dense and unyielding to pressure in their entire length. The corpus spongiosum was likewise hard and swollen. The dorsal vein of the penis was very prominent and felt like a whipcord to the touch. The testes were slightly drawn up. The pain in the organ was very severe, the patient fearing the least touch of the sheets and jarring of the bed caused him agonizing pain. This condition was found six hours after the onset. Morphine in $\frac{1}{2}$ grain doses gave relief for periods of time not exceeding three quarters of an hour. Deep chloroform narcosis failed to produce any relaxation of the erection. Four days later a parasacral block was done and though it produced complete anesthesia of the lower torso it had no effect on the priapism. Laboratory Findings: The urinalysis, blood count, and blood chemistry were all within normal limits. Two blood Wassermans were

negative. Spinal fluid cell count 12, globulin 1 plus, Wassermann negative $\frac{1}{2}$ c.c. dilution, negative 1 c.c., but positive with a 2 c.c. dilution. The colloidal gold curve was 001110000 which approaches the tabetic curve.

DISCUSSION.

The etiologic factor in this case was an early neuro-syphilis causing an irritation of the posterior spinal nerve roots. This was the first symptom of syphilis. The treatment of priapism should be directed to the causative factor as well as the local manifestation but the latter must receive first attention due to the pathological changes occurring in the venous channels of the corpora. In any priapism, regardless of the etiology, which has persisted for two days or more a thrombosis exists in the corpora, which is sufficient itself to sustain the erection. Then if one succeeds in treating the underlying cause, the erection will persist until the clot in corpora is disposed of, either by absorption or evacuation. McKay and Colston¹ advocate aspirating the corpora with a large calibre needle.

It is interesting to note that Hinman² in 1914 collected all the cases of priapism and found only 140 cases. Since 1914 not more than ten additional cases have been reported. True priapism is therefore a rare condition. Priapism may occur at any age but 97 per cent of the 140 cases were between the ages of 20 and 50 years. The youngest case was that on an infant just born who had congenital syphilis, the oldest was 75 years—of a nervous origin. The duration of the priapism in the series was from two days to two years. In those due to mechanical causes they lasted from twenty to sixty days; in those due to a nervous origin 85 per cent lasted less than ten days, but 50 per cent of this group died. In three cases the priapism persisted even after death. In 50 per cent of the entire series there was a slow subsidence of the erection. Extreme pain was present in the majority of the cases. There were urinary symptoms, such as frequency, difficulty, and retention in the majority of cases. In the entire series all lost their sex desire except a few whose initial onset was accompanied by increased libido. Power of ejaculation is lost. In about 50 per cent of the cases there was a return to subsequent power of erection but about half became potent.

CONCLUSIONS.

(1) A case of true or essential priapism is being reported, there being only about 150 cases recorded.

(2) This case is interesting because priapism was the first symptom of syphilis.

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THE TREATMENT OF GOITER

Of the two types of goiter that are likely to come to the hands of the surgeon the nodular goiter is the one about which there is never much controversy between the surgeon and the internist as to the advisability of operation. Really the only problem that arises in the treatment of nodular goiter is whether or not *any* treatment is advisable. If there is thyrotoxicosis present or if there is any suspicion of malignancy or if any pressure symptoms have arisen the goiter should be removed. In the instance of rather small nodules it may be justifiable to hesitate and to watch the patient. In the

great majority of instances a subtotal thyroidectomy should be performed. Even if there is only a single small nodule the complete operation should be done because it has been definitely demonstrated that if there is a conservative shelling out of the nodule the thyroid tissue is likely to return, grow, and thyrotoxicosis to appear. Even if the goiter is non-toxic it is not advisable to use iodine except prior to operation and then only if thyrotoxicosis is present.

The diffusely hypertrophic and hyperplastic goiter of young people usually referred to as exophthalmic goiter has been in the past a different and difficult problem. The internist, in view of the fact that the operative mortality was approximately five per cent, usually was cautious in advising operation unless symptoms were exaggerated. Even in these instances frequently prolonged rest was advised and the patient put on the disability list for long periods of time. In a given number of instances spontaneous remission might occur and the toxic thyroid symptoms disappear. Even the most conservative physician in the last few years has swung over to the conception that operation is the treatment of choice in practically all cases exhibiting toxic symptoms. The reason for this is obvious. The mortality rate now with the proper use of iodine in well conducted clinics is not over one per cent. With these patients, instead of a prolonged period of vegetation during which time they are economically useless and more or less completely disabled, it is possible after a preliminary ten days of treatment with iodine to restore them by operation to their full vigor and to economic activity in the course of a few weeks. Health is restored to them quickly and completely with only a minimum amount of risk.

Iodine is administered in the form of Lugol's solution in doses of one cubic centimeter a day or a fifty per cent solution of potassium iodide may be administered for the ten pre-operative days in doses of one-half of a cubic centimeter. Following

operation there occur at times toxic crises, usually as a result of rough handling and lack of delicacy during the operation. With such patients iodine should be given in large doses and fluids should be forced, five per cent glucose solution intravenously and a continuous saline rectal drip. The persistence of the thyrotoxic symptoms after operation is by no means unusual, and such symptoms can be readily controlled, as usually they are very mild, with iodine. It is quite common for the individuals after operation to have a hypometabolism. This may be intermittent or may be permanent. Under any circumstances it can be adequately controlled with thyroid in doses of 2/10 of a gram (3 grains) once a day. The thyroid should be stopped from time to time in order to see if the myxedematous symptoms have not disappeared even when the thyroid is discontinued.

The treatment of thyrotoxic states, whether due to nodular goiter or due to the diffuse goiter, is one of the satisfactory accomplishments of medicine the last few years. These patients can be treated adequately and convincingly. They will be completely cured in the majority of instances and if mild complications of hypothyroidism develop following operation these manifestations too can be properly handled by the physician.

LEGISLATIVE ACTIONS

At the recent Session of the State Legislature, one of the important bills that was introduced and passed had to do with the definition of osteopathy. This bill, number 390, defined osteopathy as follows: "Osteopathy is hereby defined and declared to be the treatment of disease, infirmity, deformity, defect, ailment or injury of a human being without the use of drugs or medicine, except antiseptics and anodynes locally applied, by manipulations applied to the nerve centers, bones, muscles or ligaments." This delimitation of what osteopathy is and what the osteopath can do in the way of treatment is of considerable

importance in medical practice. The osteopath, it is said, has gradually been encroaching on the domain of medicine, and this despite the fact that his education is incomplete and his training woefully insufficient in every way. With this description of just what osteopathy is it will be possible to control the instances in which medical practice is violated.

In addition to the osteopathic bill, House Bill Number 405 exempting physicians from paying license tax passed both the House and Senate by large majority but was vetoed by the Governor on account of the physicians being exempted in House Bill 826 which he signed.

It might be well to mention the names of the men who worked hard and earnestly in behalf of doctors throughout the State. These men include not only physicians, but also prominent officials in the State, such men as Governor O. K. Allen, Mayor T. Semmes Walmsley, Mr. Richard Leche, Mr. Wm. G. Hudson, Senator H. B. Ducros, Mr. Peter A. Hand and Mr. Frank J. Stich, members of the House of Representatives. Doctors who should receive particular credit for the Baton Rouge fight and conquest include the Committee on Public Policy and Legislation of the Louisiana State Medical Society, members of which were Dr. C. A. Weiss, Chairman, Baton Rouge; Dr. Foster M. Johns, Vice-Chairman, New Orleans; Dr. Glenn J. Smith, Jackson; Dr. Roy B. Harrison, President, New Orleans; and Dr. P. T. Talbot, Secretary-Treasurer, New Orleans; the members of the Committee on State Medicine and Legislation of the Orleans Parish Medical Society, Dr. C. Grenes Cole, Chairman; Dr. F. R. Gomila, Dr. F. M. Johns, Dr. W. A. Knolle, and Dr. L. A. Meraux, together with such well known doctors as Dr. P. T. Alexander, Dr. George S. Bel, Dr. C. A. Gardiner, Dr. J. D. Hunter, Dr. Emmett Irwin, Dr. I. B. May, Dr. L. J. Menville, Dr. C. A. Lorio, Dr. J. A. O'Hara, Dr. Wm. H. Seemann, and Dr. Arthur Vidrine. The medical profession of Baton Rouge was also of great help and cooperated most heartily with the

physicians of the several committees in many ways. As stated last month all these men are to be thanked for the time that they have given, and their unselfish devo-

tion to the interests of Louisiana physicians. We can assure them that their efforts are appreciated, and that we of the profession at large are grateful to them.

HOSPITAL STAFF TRANSACTIONS

STAFF MEETING OF KING'S DAUGHTERS' HOSPITAL, BROOKHAVEN, MISSISSIPPI.

Election of officers consumed most of the meeting. Those elected were Dr. O. N. Arrington, President of the Staff; Dr. H. R. Fairfax, Vice-President; Dr. R. S. Savage, Secretary and Treasurer.

Discussion then centered around our training school and whereby we could be of the greatest help to our student nurses.

Hospital standardization discussed and the president urged all members of the staff to continue as in the past and to keep our hospital up to standard.

R. S. Savage, Secretary.

STAFF MEETING OF THE MISSISSIPPI BAPTIST HOSPITAL OF JACKSON, MISS.

Regular Monthly Meeting, July 5, 1932.

The meeting was held in the staff room of the hospital on the night of July 5, at 7:30. The meeting was called to order by the President and immediately afterward ice cream and cake with punch were served and enjoyed by the staff. The usual large crowd was not present.

Dr. Henry, who has recently moved here, and Dr. Burnham, oral surgeon, were invited to join in the discussions.

Case Reports by Dr. H. R. Shands: Four cases of dysmenorrhea were reported to the staff. These cases all presented the same picture of painful menstruation with no evidence of pathology on careful examination. Several had been explored previously while in the abdomen for some other purpose.

These cases all received the same treatment which was superior hypogastric sympathectomy. All responded with a complete cure of the painful menses and great relief of the nervousness that usually accompanies the same.

Case 1. Young white female who had been dilated and pessary inserted previously with no results. At one time the abdomen had been previously opened for an appendectomy with no pathology found. Sympathectomy done with complete cure.

Case 2. Young school teacher who had to stop her work every month for a few days because of the pain. Sympathetic ganglionectomy was done with complete cure.

Case 3. Nurse who had had this trouble for a number of years and who had never been given any relief. Sympathetic ganglionectomy with cure.

Case 4. Young white woman who is in the hospital at the present time. The literature with special reference to the article in "Surgery, Gynecology and Obstetrics" of February of this year, was discussed as well as the hope for relief in a number of conditions by neurological surgery.

Dr. Frank Hagaman and Superintendent Wayne Alliston discussed the cases. Dr. Armstrong discussed the cases and would gladly welcome anything that will aid us in treating these conditions that are so exasperating at times to us all.

Two articles in the American Journal of the Medical Sciences were reviewed by the secretary: "Arrested Infection in Varicose Veins" and "Treatment of Megalocolon by Parathormone."

The sentiment of the staff was expressed in that we all hope that Dr. J. P. Wall will be out and able to attend the next staff meeting since he has been confined to his bed for some time.

Dr. Verner was introduced to the staff as a new pediatrician who has recently located here.

The list of deaths were reported and mention of the fact that a great deal of very valuable information was going to waste in view of the fact that we are not attempting to get autopsies as we should.

Superintendent Alliston made a short talk on the condition of the hospital and extended an invitation to the visitors to return again.

Dr. Felix J. Underwood made a talk on his recent trip to the East as guest of the Rockefeller Foundation.

The meeting was adjourned till the first Tuesday in September.

Lawrence W. Long, Secretary.

KING'S DAUGHTERS' HOSPITAL STAFF MEETING, GREENVILLE, MISSISSIPPI.

The regular meeting of the staff of the King's Daughters' Hospital was held at 7 p. m. on July 13, 1932. Supper was served immediately, followed by the regular program.

The meeting was opened by the chairman of the staff, Dr. John Archer, and the following additional members were present: Drs. White, Beck, Beals, Hugh Gamble, Lewis, Dickens, Wilson,

Peques, Shackelford, Lucas, Paul Gamble, Payne, Davis, Thompson, Hirsch, Eubanks and Acree.

Dr. John Davis, a recent Vanderbilt graduate, enroute to Touro Infirmary for an internship, was a guest at the meeting. Dr. Scudder of Mayersville was also a guest.

After reading of the minutes of the previous meeting, the activities of the hospital for June were taken up and discussed.

Upon motion of Dr. A. G. Payne, seconded by Dr. F. M. Acree, it was voted to take a vacation in August, and dispense with the staff meeting for that month.

A case report was given by Dr. R. B. Dickins on "Necrosis of Testicle Due to Torsion of Spermatic Cord." This paper was discussed by Drs. Thompson, Paul Gamble and Hugh Gamble, the discussion being closed by Dr. Dickins.

A case report was given by Dr. H. A. Gamble on "Carbuncle of the Face." This paper was discussed by Drs. Payne and Acree, the discussion being closed by Dr. H. A. Gamble.

The health report for the month of June in Washington County was read by Dr. Shackelford, Washington County's health officer, and the increase of typhoid fever was discussed.

Dr. Scudder discussed typhoid fever in the Delta of many years ago.

The meeting thereupon adjourned.

F. M. Acree, Secretary.

Abstract: Torsion of the Spermatic Cord.—Dr. R. D. Dickins.

Patient—F. R. F., aged 22 years, white male.

Present Illness—On May 28, 1932, while seated on the commode, he began to have a stinging pain in the right testicular region. Swelling of the right testicle was noticed about an hour later; both swelling and pain increased. He was treated for a spider bite. All symptoms subsided in several days' time.

On June 2, a 3 p. m. while walking in his room without any clothes on, he had a similar attack only much more severe. The right testicle began to swell and in six to eight hours' time it had tripled in size. Morphine, grain $\frac{1}{4}$, failed to give relief. He began to vomit and was unable to retain anything. Abdominal distention ensued which was relieved by an enema.

Twenty-four hours after the onset of the attack he entered the hospital for operation.

Previous History—History of having been treated for gonorrhea about one year ago. Has had no urethral discharge for several months. No history of a hernia. Family history negative.

Physical Examination—Just prior to operation which was June 2, at 4 p. m., temperature was 100.2° F., pulse 94, B/P 125/78. Head, neck and chest essentially normal. Abdomen soft, no areas

of tenderness in suprapubic area. No evidence of hernia. Genitalia—Right side of scrotum was slightly reddened and enlarged. Exquisite tenderness was present on the right side, so much so that palpation of the cord was impossible. At the lower part of the right scrotum a hen egg sized mass was present, seemingly an enlarged testicle which was dark on transillumination. No evidence of peristalsis. The cord and testicle on the left side were normal to palpation. Rectal examination negative. W. B. C. 20,500, Polys. 85 per cent, S. L. 12 per cent, L. L. 3 per cent. Urine negative except for the presence of a few pus cells.

Operation under gas anesthesia. A three-inch longitudinal incision was made over the right testicle. Testicular mass delivered. There was a twist of the cord just above the testicle, the cord was edematous both above and below the twist but the coloration was normal above the twist while distal to it it was discolored. The testicular mass was very necrotic and areas of gangrene were present. The twist was corrected which greatly improved circulation, so much so that a pack had to be inserted where the testicle had been incised, to control bleeding, the tissue being too necrotic to suture. Orchidectomy would have been the logical procedure but the consent of the patient was not obtained.

Course—Convalescence was almost uneventful. At the present time the testicle is about twice the size of a normal testicle and is quite insensitive to pain, no pain being elicited even on a forcible squeeze of the testicle.

Discussion—Torsion of the spermatic cord, often referred to as torsion of the testicle, was thought to be comparatively rare until recently. There had been only 120 cases reported prior to 1920, but since then the reports have been more numerous, which apparently means that the condition has been overlooked or misdiagnosed hitherto. This condition accounts for not infrequent instances of marked atrophy of the testicle, in which one cannot elicit a history of mumps, trauma or any other cause.

The diagnosis is not difficult providing one bears the condition in mind. Differentiation between acute epididymitis, strangulated hernia, and neoplasm is necessary.

The treatment should always be surgical. "If the testicle and epididymis are viable as indicated by bleeding on incision and there is no bluish black discoloration, the cord should be untwisted, the tunica vaginalis inverted and the organ sutured to the bottom of the scrotum." If not viable, orchidectomy is the procedure.

Abstract: Seven Cases of Carbuncle of the Upper Lip and Face.—Dr. H. A. Gamble.

The seriousness of infections of this character is not generally recognized but an estimated mortality rate of over 20 per cent is significant of the gravity of the condition.

Pathology is usually divided into three stages: first, that of inception or pimple, second, of spread and involvement of the contiguous tissues, and third, of venous thrombosis with involvement of cavernous sinus.

The method of spread is by the plexus of facial veins, which are valveless, through the angular vein to the ophthalmic and thence to the cavernous sinus or through the facial to the pterygoid plexus and thence to the cavernous sinus. Cavernous sinus thrombosis is inevitably fatal.

History of development is usually of a pimple following a hair follicle infection in which there has been some meddlesome and injudicious interference, such as picking or opening accompanied usually by squeezing.

Treatment—During state of development there is absolute necessity for a policy of noninterference. No pulling out of hairs, picking with a needle or opening with a scalpel is to be countenanced. All fatal cases usually have a history of such injudicious interference. Treatment at this stage should consist of absolute rest in bed and the application of hot fomentations. Hot sterile flaxseed meal poultice is as efficacious in promoting drainage and discharge from infected area as any other form of fomentation. At all times the utmost gentleness must be employed, but as the lesion develops the necrotic cap can be removed or the various openings united, taking particular pains to in no wise trespass upon the periphery of the lesion. Active free surgical interference is never indicated and when resorted to usually results fatally.

Scott advocates cauterization of the center of the initial lesion; Bullock and Baily ligation of the angular veins to prevent involvement of the cavernous sinus. A few men advocate excision of the lesion followed later with a plastic operation.

Of the seven cases reported two died within twenty-four hours, one was treated by crucial incision and recovered and four were treated along the lines suggested with recovery of all.

Carbuncles of the face and lips are distinct clinical entity due largely to anatomical arrangement of the facial muscles and distribution of fascia and treatment directed toward their cure is distinctly different from that for carbuncles in general.

VICKSBURG SANITARIUM STAFF MEETING.

The regular monthly meeting of the Staff of the Vicksburg Sanitarium was held on July 11, at 6:30 p. m. Dr. R. A. Street, Jr., was elected a

member of the staff. Dr. F. M. Smith, Director of the Warren County Health Department, made a report of the vital statistics of the county for the month of June.

After the reports from the records department and analysis of the work of the hospital, special case reports were presented as follows:

1. Carcinoma of the Transverse Colon With Direct Extension into Small Intestine; Resection of Involved Segments of Small and Large Intestines.—Dr. A. Street.

2. Mediastinal Tumor.—Dr. R. A. Street, Jr.
Selected radiographic studies were demonstrated as follows: Osteomyelitis of jaw; Perthe's disease; Fracture of the skull; Pulmonary tuberculosis (3 cases); Maxillary and frontal sinusitis; Carcinoma of the stomach; Carcinoma of the colon; Ureteral calculus (2 cases).

Three-minute reports of the literature of the month were made as follows:

Primary Suture with Direct Anastomosis in Colon Resections.—Dr. A. Street.

Experimental Thrombo-anginitis Obliterans.—Dr. L. S. Lippincott.

Ventricular Paroxysmal Tachycardia and Hypothyroidism and Myxedema.—Dr. L. J. Clark.

Abortive Poliomyelitis; Scurvey in a Three-Weeks Old Baby.—Dr. G. C. Jarratt.

The meeting closed with a lunch. The next meeting of the staff will be held on August 10, at 6:30 p. m.

Leon S. Lippincott, Secretary.

Abstract: Carcinoma of the Transverse Colon with Extension into the Small Intestine.—Dr. A. Street.

Patient.—White male, aged 27 years; admitted to the Vicksburg Sanitarium on June 11, 1932. Chief Complaint—Loss of weight and strength; intermittent colicky abdominal pain; increasing constipation. He never has anything but loose watery stools which occur only after taking a cathartic. Symptoms have been gradually appearing during the last eight months. Seven months ago appendectomy was done, with no relief; felt worse after the operation than before. Pain is considerably relieved after catharsis; it is worse after eating. Pain is located about the umbilicus; radiation to the penis. Previous History—For years has had occasional attacks of constipation which he treated himself by taking calomel. Family History—Not remarkable. No cancer. Physical Examination—Emaciated and pale. There was an irregularly rounded mass, about three inches in diameter, in the lower abdomen; movable and moderately tender. Fluoroscopic and radiographic examinations showed a marked constriction in the mid transverse colon, involving a segment about three inches long. The deformity

suggested the presence of a growth in this portion of the colon. There was marked obstruction but it was not complete. The transverse colon was unusually long and there was marked sagging so that the involved portion rests at the brim of the pelvis. Preparation for operation consisted of washing the lower bowel daily for three days. Diet was such as would give a small residue.

Operation—June 14, 1932. Left mid-rectus incision. There was a mass the size of a large orange in the mid portion of the transverse colon, indurated and attached to the anterior abdominal wall by a membranous band. This was released by removing part of the abdominal wall at the site of attachment. On delivering the growth it was apparent that a loop of small intestine was incorporated in the mass. The mesentery of this loop showed numerous enlarged lymphatic glands, some of which were three-fourths inch in diameter. There were fewer and smaller enlarged glands in the transverse mesocolon. No nodules were observed in the liver. The picture was rather hopeless but resection seemed advisable, especially in view of the possibility that the glands might be inflammatory and not malignant.

Procedure—In order to remove the area of mesentery containing involved glands, it was necessary to deprive about 30 inches of small intestine of its circulation. Accordingly this amount of small intestine was resected along with its mesentery and contained glands, leaving it attached to the mass in the colon where it was incorporated. The remaining ends of the small intestine were ligated and inverted, and lateral anastomosis performed. The involved transverse colon was lifted out of the abdomen. The two limbs of the large intestine on each side of the growth were sutured together so they were parallel. The growth was lifted well above the abdominal wall so as to make the point to be divided wide of the growth, and then the abdominal wound was closed around the two limbs of bowel, completing the first stage of the Mikulicz operation according to the original technique. The mesocolon was not divided. The edges of the peritoneum were sutured to the bowel at point of emergence. The ends of the resected portion of the small bowel were now divided close to the growth and the excess small intestine removed, leaving only that portion which was directly in the tumor mass. The exteriorized intestine and growth were now wrapped in vaseline gauze and dressings applied.

The operation was well borne, and the patient was remarkably comfortable during the next three days, which were allowed to elapse before doing the second stage of the operation. On June 13, the exteriorized bowel was removed. Mesocolon was divided flush with the abdominal wall and

ligated. The distal limb of the loop of bowel was then divided close to the abdominal surface between clamps, and the clamps left on.

The proximal end was left open after cutting across it and the Paul tube sutured into it. Drainage from the bowel through this tube was satisfactory. The bowel content was kept soft by washing. The tube was removed after five days.

On the eighth day after operation, a clamp was placed on the spur between the proximal and distal ends of bowel, the third stage of the Mikulicz operation. The clamp fell off on the fourth day and shortly afterwards feces began to appear in the return from ordinary enemas which were given daily. The patient returned to his home on July 13 and will return in one month for closure of the fecal fistula. He is up and about and is gaining weight and strength. The bowels move well with the aid of a daily enema.

Tissue pathology by Dr. Lippincott showed the growth to be three and one-half inches in diameter and to include wall of colon and the adherent wall of the small intestine to its mucosa. The lumen through the growth at proximal end was one-half inch in diameter, ulcerating lumen one inch in diameter in the middle and the distal lumen one-half inch in diameter.

Microscopic examination showed gelatinous carcinoma with much associated inflammation, both acute and chronic. The nodes of mesentery and mesocolon showed no cancer, being inflammatory only.

In view of the pathological findings, it seems probable that all of the involved tissue in this case has been widely removed (four inches beyond growth at each end), and that the patient has an excellent chance that he is permanently cured.

Abstract: Mediastinal Tumor.—Dr. R. A. Street, Jr.

Patient.—Colored male, aged 60 years, farmer.

Present Illness: Patient was first seen June 12, complaining of constant dull pain in the chest for the past eight months, more marked over left side, and associated with spells of coughing, loss of appetite, weakness and moderate loss of weight (20-30 pounds). Eight months ago patient had chills every day for one week with high fever and pain in left shoulder, worse on deep breathing. No productive sputum or sweats. Began to improve somewhat under care of physician and symptoms grew less severe up to one month ago. Pain and cough worse since then; associated with afternoon fever and palpitation. No sweats or hemoptysis. Appetite very poor for past month; unable to work because of weakness. Has noted moderate dyspnea and edema of right ankle for past three months but no orthopnea. Has complained of a "heavy feeling" over the lower

abdomen for three months, without pain or upsets after meals. Stools negative. Nocturia (two times) for past eight months, with occasional burning; no incontinence. Past History—Pellegra for past two years, with black areas over backs of hands and on left elbow which have begun to crack recently. Treated with brewer's yeast six months ago for period of two months; none since then. General health good until present illness. Had gonorrhea several times in youth, no sequelae. No definite luetic history; no history of any leutic treatment. Pneumonia in early adult life, no sequelae. No history of chest injury. Family History—Irrelevant. Physical Examination—Emaciated, poor skin turgor; appearance of chronic illness. Temperature, 99.2° F.; pulse, 134; respiration, 20; blood pressure, 96/60. Trachea pulled to left. Left side of thorax sunken with diminished expansion. Right side negative. Fremitus diminished over entire anterior chest, left. Dullness over entire left anterior chest with diminished breath sounds. There was an area just under the clavicle with bronchial breath sounds and nasal quality to spoken voice. Whisper increased over entire left chest. Heart rapid but regular; no murmurs; point of maximal intensity sixth intercostal space, within nipple line. Moderate clubbing of fingers. Several black crusted areas over backs of both hands and on left elbow, about size of a quarter. Physical examination otherwise not remarkable. Laboratory Findings—Blood Wassermann, Kline and Young and Kahn tests negative. Hemoglobin, 67 per cent; erythrocytes, 3,600,000; leukocytes, 7,600; differential leukocyte count; lymphocytes, 25 per cent; polymorph, neutrophils, 74 per cent; polymorph. eosinophiles, 1 per cent.

Fluoroscopic and roentgen ray examinations of chest showed large shadow on left, of uniform density, with regular rounded outline and apparently pulsating. The trachea and heart were pulled over slightly to the right. There was apparently no connection between the large shadow and the mediastinum or with the aorta. The left diaphragm was clearly outlined, but was slightly elevated. Course—Brewer's yeast was given and patient advised to return in one week. Again seen on June 19 with no improvement except disappearance of black areas on hands and elbows. Given potassium iodide and Blaud's pills; yeast continued. Patient was last seen on July 4 without improvement except for moderately better appetite. Pulse still rapid and temperature slightly elevated. No sputum obtained. Roentgen ray examination gave still the same findings. Given iron ammonium citrate; potassium iodide and yeast continued.

VICKSBURG HOSPITAL STAFF MEETING.

The regular meeting of the clinical staff of the Vicksburg Hospital and Clinic was held on Thurs-

day evening, June 16, at 6:30 p. m.

The usual routine business was transacted, including detailed discussion of cases of mortality occurring during the previous month.

The following scientific program was presented:

1. Uterine Bleeding.—Dr. I. C. Knox.
2. Hyperemesis Gravidarum.—Dr. W. E. Aiken.
3. Report of Recent Visit to Various Clinics.—

Dr. W. G. Weston.

Following the above program, lunch was served and the meeting was adjourned.

Abstract: Uterine Bleeding.—Dr. I. C. Knox.

The literature dealing with uterine bleeding was discussed in considerable detail and the condition was classified in three types: (a) Menstruation, (b) ovulation, and (c) metorrhagia. A special discussion was made of cystic degeneration and conditions of the ovary that might provoke excessive bleeding.

The cases of abnormal uterine bleeding, which have been studied in this clinic were reviewed, particular attention being paid to the etiology of the condition, the therapy employed and the final results. A recent case of carcinoma of the cervix, in which a most enormous hemorrhage occurred following vaginal examination was presented. It was found that a large proportion of cases of malignancy of the cervix which presented themselves, were at time of first examination, far advanced.

The essayist felt that excessive uterine bleeding during puberty was due almost always to a degeneration of corpus luteum formation. A special discussion was made of chlorotic individuals, and the treatment of this type at the time of climacteric, excessive bleeding is not unusually considered as expression of ovarian hyperfunction. Abnormality or irregularity of menstruation at this time, however, in the opinion of the essayist, are matters of great concern and demand very thorough study.

In conclusion, the essayist sums up the various causes of abnormal uterine bleeding, discussing in detail the determination of the diagnosis, and reviewing rapidly the therapy indicated.

Abstract.—Hyperemesis Gravidarum.—Dr. W. E. Akin.

A review of the literature concerning this subject was made. Special mention was made of the opinions of various authors relative to the percentage of cases of pregnant women who suffered nausea and vomiting. It was remarked by the essayist that at times it was difficult to determine when the so-called physiological vomiting ceased and the condition became pathologic or pernicious. It was felt, as a matter of fact, that all nausea and vomiting were toxic in origin, and it was assumed that the cause of vomiting in general was due to some factor commonly present in normal pregnancy, and consequently that pernicious vom-

iting was due to an increase in the amount or in the potency of this factor, or to decreased resistance to its action on the part of the patient. The essayist remarked, therefore, that the etiology of this condition could not be solved until this toxic substance was discovered and until it was ascertained why it became increased in quantity under certain circumstances.

The clinical features were discussed and particular mention was made of the changes noted in the liver, the kidneys, the stomach and the blood in advanced and fatal cases. It was noted that

the changes in the above organs could not be satisfactorily explained by assuming that the cause was starvation and dehydration alone.

A discussion of the clinical diagnosis was made and the difficulties in determining when the so-called physiological vomiting became pathologic. Especially at times it is difficult to separate the neurotic from the toxic form.

The indications for therapeutic abortion were discussed and, likewise, in detail, were discussed the treatment for the condition of pernicious vomiting in general.

LOUISIANA STATE MEDICAL SOCIETY NEWS

PROCEEDINGS OF THE GENERAL MEETING OF THE LOUISIANA STATE MEDICAL SOCIETY

The first of the citations of the former Presidents receiving the Past Presidents' emblems were published in part in last month's issue of the Journal. The following citations were read in addition to those already given:

Clarence Pierson: Born in Natchitoches. Was educated in private schools in Natchitoches, Ma-gruder's Collegiate Institute, and Louisiana State University and graduated as M. D. at Tulane. Served as interne at New Orleans Charity Hospital.

Practiced medicine at New Iberia 6 years. Was coroner Iberia Parish 5 years and superintendent of public schools 3 years. Post-graduate work at New Orleans Polyclinic. In 1901 moved to Alexandria where he inaugurated movement among physicians to establish first Public Sanitarium now Baptist Hospital. Served as Medical Superintendent of the Hospital for the Insane at Jackson, La., for 15½ years. President of State Medical Society during 1916-1917. A member of the American Medical Society. Has been a liberal contributor to the different medical periodicals. At present Superintendent Louisiana State Hospital, Pineville, La.

W. H. Knolle, 3201 Canal St., New Orleans, La.
April 14, 1932.

To the Officers and Members,
Louisiana State Medical Society.
Ladies and Gentlemen:

I was born at Industry, Texas, on January 15, 1870. After leaving the rural school, I entered A. & M. College of Texas, graduating in June of 1888, studied medicine at Tulane University, graduating in April, 1891. After taking a post-graduate course, I practiced my profession for nearly thirty years; appointed visiting physician to Charity Hospital for ten years; served two terms as President of Orleans Parish Medical Society, 1915 and 1916. Served as President of the

Louisiana State Medical Society, 1918 and 1919, during the World War period. Stricken with influenza, pneumonia and later tuberculosis, compelled me to retire in 1921, and have since been totally and permanently incapacitated. Due to the kindness and untiring efforts of my doctor friends, my beloved helpmate and a little common sense, I am still one among you and hope to be for some time to come.

With kind personal regards, I am

Very truly yours,

W. H. KNOLLE, M. D.

Homer Dupuy: Received his A. B. degree from Jefferson College, Ph. D. Loyola University. Graduated in Medicine Tulane Medical College in 1897. He was President of Orleans Parish Medical Society in 1913. President of Louisiana State Medical Society, 1921. President of the Hotel Dieu Staff in 1924.

Active service Medical Advisory Board during the World War. Member State Board Medical Examiners. At present is Professor of Oral Surgery, Loyola University Dental College, Senior Surgeon Dept. Oto-Laryngology, Charity Hospital, Councilor for Louisiana of Southern Medical Association, Professor of Oto-Laryngology, Louisiana State University Medical Center. Has contributed over 100 articles to medical literature. Has done original work in his specialty, and he has devised several instruments for use in Surgery of the Ear, Nose and Throat.

Joseph Edward Knighton, Shreveport, La.: Born 1870, Claiborne Parish, La. Received M. D. degree from Medical Department of University of Nashville in 1899. Became Fellow, American College of Physicians in 1923. President, Shreveport Medical Society in 1917. President Louisiana State Medical Society in 1921. President Tri-State (Ark., La. & Tex.) Medical Society in 1916. President Southern Gastro-Entrological Association in 1924. Vice-President Louisiana State Board Medical Examiners from 1918 to the

present time. Served during World War as member of District Examining Board and member of Voluntary Service Corps. Chief, department of medicine of Willis-Knighton Clinic. Vice-President and Chief of Medical Service of the Tri-State Hospital of Shreveport, La. Chairman, has devised several instruments for use in surgery of the ear, nose and throat.

Paul J. Gelpi: An A. M. graduate of Jesuits College, received the Doctorate from Tulane University. His medical education was rounded off by two years intensive study in the major hospitals of Paris, Vienna and Berlin. Returning from Europe to his native city, he was called to the chair of his specialty in the New Orleans Polyclinic, and has filled the same position in the Tulane Post-Graduate Medical School up to date. He has been President of the Orleans Parish Medical and the Louisiana State Medical Society. He was Chairman of that committee or arrangements which made such a brilliant success of the Semi-Centennial anniversary of this Society. He is a member of the staff of all the leading New Orleans Hospitals, has been a medical inspector, and is now a member of the City Board of Health, having held that position since 1925.

Lester James Williams: Received the degrees of A. B., Louisiana State University, 1900, and M. D., Tulane University, 1904. Is a Fellow of the American College of Physicians and of the American College of Radiology, Past President of the Louisiana State Medical Society, and of the East Baton Rouge Parish Medical Society. Founder of the Sixth District Medical Society, Visiting Radiologist to Our Lady of the Lake Sanitarium and Baton Rouge General Hospital, and Councillor for the Radiological Society of North America.

He was commissioned a First Lieutenant in the Medical Corps United States Army during the World War and assigned to the Eightieth Division, promoted to Captain, and made Commanding Officer Ambulance Company No. 318; served thirteen months overseas with the American Expeditionary Forces, with service in two major offensives, St. Mihiel and Meuse-Argonne; promoted to Major and demobilized with same rank. At present Lieutenant-Colonel of Medical Reserves, also a past commander of Nicholson Post American Legion.

Stephen Myrtle Blackshear: Was born in Louisiana in 1884. Received his medical diploma from Tulane University and taught Oto-laryngology in the same institution for twenty years.

He has been an active worker for organized medicine, due recognition of which has been accorded by his confreres, by electing him President of the Orleans Parish Medical Society in 1921, President of the State Society in 1926, and representative to the House of Delegates A. M. A.

for five years. He was appointed a First Lieutenant in Medical Corps of the U. S. Army during the World War, and assigned to duty at Camp Shelby.

Three years ago he married Miss Maybart Frost Morrison of Point Coupee Parish, now President of the Woman's Auxiliary to the Orleans Parish Medical Society. Mrs. Blackshear will now make good her promise, "to honor" the doctor by conferring his medal.

Arthur A. Herold: Born in Shreveport in 1882, graduating from the Shreveport High School in 1897 and finishing at a commercial college, after which he followed a business career for five years. Preferring medicine, he entered Tulane Medical School in 1902, graduating with distinction in 1907, after two years' service as interne in Charity Hospital.

Since practicing in Shreveport, he has served his community as pathologist and assistant surgeon of Shreveport Charity Hospital, City Health Officer, Coroner and Health Officer of Caddo Parish and has filled every position in his local medical society, following which he served as State Councilor for four years, before being elected President of the State Society in 1926. At present, he is a member of his local society, as well as the Southern and American Medical Associations. In 1923 he was elected a Fellow of the American College of Physicians.

He is now president and chief of the medical staff of North Louisiana Sanitarium, consulting physician to the Charity Hospital and the Pines Sanatorium and Advisor in Medicine, with rank of Professor, to the Louisiana State University Medical Center.

Leon John Menville: President of the State Society in 1928-29, was born in Louisiana, educated at the Louisiana State University, and after finishing his medical course joined his father in general practice at Houma, La. Becoming interested in Radiology he decided to make it his specialty, and sought a broader field, locating in New Orleans. He was commissioned a First Lieutenant Medical Corps, U. S. Army, during the World War, and rendered efficient service as a member of the Tuberculosis Examining Board at Camp Beauregard. At present he holds the position of President of the Louisiana State Board of Medical Examiners, is also Assistant Professor of Radiology at Tulane Medical School, State Councilor of Radiology, College of North America, member of several societies pertaining to his specialty, and editor of the Journal Radiology, the largest journal of its kind in the world. Three national fraternities have honored Dr. Menville, the A. O. A., O. D. K. and P. S. M.

Frank T. Gouaux: Was born in Natchitoches February 22nd, 1883. President in 1929-1930. He was educated at Jesuits College, receiving his A. B. degree in 1901 and graduated in medicine

at the University of Pennsylvania. Soon after entering upon the practice of medicine he became interested in organized medicine, striving for the betterment of his chosen profession by contributing numerous papers on medical topics and actively adding new members to his local and State medical organizations. He served as Health Officer to the Parish of Lafourche from 1916 to 1924. For several years he represented the third congressional district as councilor of the L. S. M. S. During his entire tenure as councillor of the Third District he held the unique honor annually reporting his district as 100 per cent for organized medicine.

During his presidency the Women's Auxiliary of the Louisiana State Medical Society was organized and held their first annual meeting in conjunction with the 51st anniversary of the State Society. He devoted much time to medical organization work throughout the State, and gave his best efforts toward the improvement of the New Orleans Medical and Surgical Journal. Dr. Gouaux is a member of the Lafourche Parish Medical Society, of the Louisiana State Medical Society, of the American Association, and of the Southern Medical Association.

Herman B. Gessner: Received A. B. degree at Tulane in 1889, A. M. in 1891 and M. D. in 1895. Served as interne in Charity Hospital 1893-1895. Was president of Orleans Parish Medical Society, 1902. President Louisiana State Medical Society, 1930-1931. Acting Assistant Surgeon U. S. Army, 1898. Acting Assistant Surgeon United States Public Health Service, 1897-1905. First Lieutenant M. R. C., 1916. Acting Assistant Surgeon U. S. Army, 1918. Professor of Clinical Surgery Tulane University School of Medicine, 1909. Senior Associated Surgeon Touro Infirmary, 1910. Senior Visiting Surgeon Charity Hospital, 1913. Chairman Conference Committee Charity Hospital Visiting Staff, 1913-1916. Married in 1900, 4 children and 9 grandchildren.

Sidney Conroy Barrow: Was born in Louisiana, graduated as B. S. at Centenary College of Louisiana, studied medicine and finished as M. D. at Memphis Hospital Medical College. He served as an interne in the Shreveport Charity Hospital and began the practice of medicine at Torras, Louisiana. He later removed to Shreveport, specializing in Radiology and enjoys a large practice. Dr. Barrow is one of the pioneers in Radiology, being one of the first to take up that branch of medicine in his section of the country. He is radiologist for the Shreveport Charity Hospital, the Schumpert Sanitarium and various railroads. Also a member of the Shreveport Medical Society, the American Medical Association; the Southern, the American College of Radiology and the Lou-

isiana State Medical Society of which he is President at the present writing.

Dr. Barrow married Miss Aline Allain of West Feliciana and has one daughter.

CHAIRMEN OF SECTIONS

The following Chairmen of Scientific Sections for the approaching meeting of the Louisiana State Medical Society in Lake Charles, April 25, 26, and 27, 1933, have been appointed by the President:

Medicine and Therapeutics—Dr. Sam Hobson, New Orleans.

Pediatrics—Dr. Cecil O. Lorio, Baton Rouge.

Nervous Diseases—Dr. E. McC. Connely, New Orleans.

Bacteriology and Pathology—Dr. A. V. Friedrichs, New Orleans.

Public Health and Sanitation—Dr. C. C. De-Gravelles, Morgan City.

Gastro-Enterology—Dr. Daniel N. Silverman, New Orleans.

General Surgery—Dr. C. Grenes Cole, New Orleans.

Gynecology and Obstetrics—Dr. Wm. D. Phillips, New Orleans.

Eye, Ear, Nose and Throat—Dr. M. P. Boebinger, New Orleans.

Urology—Dr. C. L. Peacock, New Orleans.

Radiology—Dr. C. P. Rutledge, Shreveport.

Orthopedic Surgery—Dr. J. C. Willis, Jr., Shreveport.

Those desirous of reading papers should communicate with the various chairmen as promptly as possible. The programs for each Section must be in the hands of the Secretary-Treasurer not later than February 25, 1933.

SECOND DISTRICT MEDICAL SOCIETY.

Dr. Daniel N. Silverman of New Orleans, Councilor of the Second Congressional District of the Louisiana State Medical Society, presented a charter to the newly organized Second District Medical Society at a meeting held in Destrehan, Friday, July 22. The meeting was presided over by Dr. J. S. Kopfler, President. By-Laws were adopted by the Society, and it was decided to hold regular monthly meetings the third Thursday in each month. An interesting talk on the purposes of the newly organized society was made by the Secretary, Dr. L. O. Waguespack. Brief talks were also made by several of the members of the Society and the following guests: Dr. Roy B. Harrison, President of the Louisiana State Medical Society; Dr. P. T. Talbot, Secretary-Treasurer of the Louisiana State Medical Society; Dr. H. E. Bernadas, Chairman of the Council of the Louisiana State Medical Society; Dr. Leon J. Menville; and Dr. Emmett Irwin.

FIFTH DISTRICT MEDICAL SOCIETY

The Fifth District Medical Society of Louisiana met in regular session Tuesday, June 14, at 5:30 p. m. at the St. Francis Sanitarium, Monroe, La.

The meeting was opened with a banquet served by the Sisters and Nurses of the St. Francis Sanitarium. During the banquet Miss Roberta O'Donnel entertained with a Spanish Dance number. She was accompanied at the piano by Miss Bennett.

Following this, the scientific meeting was called to order by the President, Dr. D. S. Calhoun of Ruston. He introduced Dr. P. T. Talbot of New Orleans, Secretary-Treasurer of the Louisiana State Medical Society who spoke on the value of organized medicine both to the profession and the layman. He showed that only about 50 per cent of the physicians of our district are affiliated with the State Society, however, all reap benefits from it. He made an earnest plea for an increase in membership.

Next, Dr. S. C. Barrow of Shreveport, Past President of the State Society, was introduced and he also spoke on value of closer associations between physicians and proper handling of charity work.

Following this, Dr. J. B. Vaughan of Monroe spoke on "The Present Economic Conditions as it Affects the Medical Profession." He emphasized the importance of the physician facing the issue squarely and adjusting himself to present conditions.

Dr. W. M. Hunter of Monroe then spoke on "Differential Diagnosis of Early Pulmonary Tuberculosis."

Following this, a letter from Mrs. J. B. Vaughan, President of the Ouachita Parish Medical Society Auxiliary, was read. She invited all physicians' wives in this district to join their organization and especially invited them to attend their December meeting which will be held at the same time as the Fifth District meeting.

Dr. John Pracher, Pathologist of the St. Francis Sanitarium of Monroe, then gave a talk on the "Importance of the Friedman's Test for Early Pregnancy." He also gave a practical demonstration of the test.

Drs. Chas. Gowan, Joseph Heard and Peacy Gilmer of Shreveport gave an interesting paper with lantern slides on "Some Aspects of Chest Surgery."

The last paper was by Drs. J. W. Cummins, B. M. McKoin and F. P. Rizzo of Monroe. They presented a case of unilateral, polycystic kidney with successful treatment. Lantern slides of the various congenital anomalies of the kidneys were also shown.

During the meeting, a telegram from Dr. Roy B. Harrison of New Orleans, President of the Louisiana State Medical Society, expressing his

regrets at not being able to attend was read. Also a letter from Dr. Leon S. Lippincott, Secretary of the Isaquena-Sharkey-Warren Counties Medical Society of Mississippi, asking that we hold our December meeting on a day that will not conflict with theirs, so members of the two societies can go to each meeting if they wish. He gave the date of their next meeting as December 13. A resolution by Dr. Rutledge that these wishes be passed upon favorably was seconded and passed.

Guests and visitors were then introduced by Dr. Rizzo. There were 76 members and guests present.

Dr. Taylor of Farmerville then recited an enlightening poem by Edgar Guest on "A Tribute to the American Doctor," which was well received.

There being no further business a motion to adjourn was entertained and passed at 9:30 p. m.

Frank P. Rizzo, Secretary.

Fifth District Medical Society of La.

SIXTH DISTRICT MEDICAL SOCIETY.

The Sixth District Medical Society met in annual session at Our Lady of the Lake Sanitarium, Baton Rouge on Thursday, July 14, 1932.

This was a memorial meeting and Dr. C. A. Weiss, president elect of the Louisiana State Medical Society, delivered a beautiful eulogy of Dr. "Bob" Jones, who had recently died.

Dr. Lester J. Williams of Baton Rouge was elected president to succeed Dr. F. F. Young, Sr., of Covington. Dr. Cecil Lorio was elected secretary. The following vice-presidents were elected:

East Baton Rouge.....	Dr. Sidney Porter
East Feliciana.....	Dr. Clovis Toler
Iberville.....	Dr. Guy A. Darcantel
Livingston.....	Dr. M. Williams
Tangipahoa.....	Dr. J. H. McClendon
Pointe Coupee.....	Dr. M. O. Becnel
St. Helena.....	Dr. H. A. Tynes
St. Tammany.....	Dr. H. C. Gautreau
Washington.....	Dr. E. E. Lafferty
West Baton Rouge.....	Dr. Paul Landry
West Feliciana.....	Dr. C. C. Blakeney

The Invocation was delivered by the Rev. Father Thos. Colbert.

The address of welcome was delivered by Dr. Clarence A. Lorio representing the Hon. O. K. Allen, Governor of Louisiana.

The scientific program was as follows:

1. Review of Common Displacements of the Uterus. Dr. Arthur Vidrine, New Orleans, La.
2. Encephalograph in the Study of Convulsive States. Dr. R. C. Young, Shreveport, La.
3. Some Considerations in Regard to Serum Proteins and Edema. Dr. Phillip Jones, New Orleans, La.
4. The Nervous Child. Dr. Cecil Lorio, Baton Rouge, La.

After the program, the retiring President, Dr. F. F. Young, entertained the membership and invited guests at an elaborate banquet.

AVOYELLES PARISH MEDICAL SOCIETY

The Avoyelles Parish Medical Society met in regular session at the home of Dr. S. J. Couvillon, Moreauville, Wednesday evening, June 15. Dr. Emeric de'Nux of Echo, Rapides, was guest of the occasion. The following members of the society answered the roll: Dr. Emil Regard, Kirby Roy, Walter and Sam Couvillon, R. G. Ducote, W. A. Quirk.

Following extensive discussions along "Medical Business Economics," the doctors were served lunch by Mrs. Couvillon, after which a paper on the subject of "Eclampsia" was presented by Dr. Emeric de'Nux. The paper proved interesting and timely and was discussed by all the physicians present. In view of the fact that Dr. de'Nux is a former Avoyellean, it was moved and unanimously carried, that he be made an honorary member of the Avoyelles Parish Medical Society.

By Dr. Kirby Roy and seconded by Dr. Remy Ducote, it was moved and carried that the Society meet every quarter and that every other meeting be made a "business meeting."

The Society then adjourned to meet in a business session only at Marksville. Wednesday evening, September 14, 1932.

S. J. Couvillon, M. D., Secretary.

NOTICE

At the last meeting of the Journal Committee it was decided that discussions of scientific papers should be limited to 400 words. This is the same number of words as allowed for discussions reproduced in the Journal of the American Medical Association. The Journal Committee felt that a discussion of this length gave the discussor plenty of opportunity to express his opinions concerning the contents of the paper presented by the essayist. The discussions have a tendency to become verbose and irrelevant. What a man desires to say can in a great majority of instances be put forcibly and fully in a discussion of 400 words.

DR. URBAN MAES APPOINTED PROFESSOR OF SURGERY IN L. S. U. MEDICAL CENTER

Dr. Urban Maes, for many years Professor of Clinical Surgery of Tulane Medical School, has accepted the Chair of Surgery in the new Louisiana State University Medical Center, according to information given out by Dr. Arthur Vidrine, Dean of the School. Dr. Maes had a distinguished career in surgery. He is one of the outstanding surgeons in the South, and has achieved a reputation which is not bound by geographic lines.

NEWS ITEMS

The Board of Trustees of the American Medical Association has appointed Dr. J. H. Musser, editor of the New Orleans Medical and Surgical Journal, one of the five members of the Editorial Board of the Archives of Internal Medicine.

The Eleventh Annual Session of the American Congress of Physical Therapy will be held at New York, September 6-9, 1932.

The many friends of the late Dr. John B. Deaver have formed a committee to establish a perpetual memorial fund in his honor. The income from this fund will be used to afford aid to needy physicians and their families. Friends of Dr. Deaver who may wish to subscribe to this fund may send their contributions to Dr. F. H. Adler, 313 So. 17th Street, Philadelphia, Pa.

The New York Academy of Medicine will hold their 1932 graduate fortnight from October 17 to 28. All phases of tumors, their diagnosis and treatment will be covered in this meeting. A magnificent list of speakers has been selected, and a splendid group of clinics has been arranged.

Dr. A. T. McCormack, State Health Officer of Louisville, Kentucky, announces that an eight months' course in laboratory technic will be given under his direction by the State Board of Health. The term begins September 19, 1932.

Lawrence G. Sykes, M. D., formerly Medical Director of the Connecticut General Life Insurance Company, has been appointed Medical Director of the Life Extension Institute, the position formerly held by the late Dr. Eugene Lyman Fisk.

The Third Congress of the French Society of Plastic and Esthetic Surgery will be held at Paris, October 7 and 8, 1932, under the Presidency of Dr. Dartigues. During the Congress there will be an exhibition of instruments and books concerning esthetic surgery. For further information, address Dr. Dartigues, 81, rue de la Pompe, Paris, 16e, France.

HEALTH OF NEW ORLEANS

The Department of Commerce, Division of Vital Statistics, has issued the following weekly reports on the mortality rate in New Orleans. During the week ending June 18, there were reported 136 deaths, 86 of which were in the white population and 50 in the colored. The death rate for the total number was 15.0, for the white race 13.3, and for the colored 19.0. The following week ending June 25 saw quite a considerable increase

in the city death rate. There was a total number of deaths of 165, giving a rate of 18.2. There was a slight increase in the number of white deaths, the rate being 14.6, but the real increase was in the number of colored deaths, 71, with a rate of 27.0. The infant mortality rate in this week was 114, made considerably greater on account of the colored infant mortality rate of 165. For the week ending July 2 the rate was still higher than it has been for a long time. The total death rate was 17.3 as a result of 157 deaths, 101 in the white population giving a rate of 15.7, and 56 in the colored, whose rate was 21.3. The infant mortality rate was 119, but this week the increased rate depended upon a large number of deaths among white infants under one year of age, responsible for a rate of 131. The next week which ended July 9 saw a decrease in the total number of deaths, there being 142, divided white 79 and colored 65. The death rate for both races was 15.6, the whites 12.3, and the negro 24.0. The infant mortality rate fell to 91, but would have been much lower had not the negro mortality rate in infants been 131.

INFECTIOUS DISEASES IN LOUISIANA

Dr. J. A. O'Hara, President of the Louisiana State Board of Health, in collaboration with the Treasury Department of the United States Public Health Service, has issued morbidity weekly reports which briefly abstracted contain the following information. For the twenty-fourth week of the year ending June 18, there were reported a phenomenally large number of cases of syphilis, 132, and a reasonably large number of cases of gonorrhea, 49. Of the other reportable diseases that occurred in double figures pulmonary tuberculosis led with a total of 29 cases, followed by 24 cases of typhoid fever, 18 of diphtheria, 18 of malaria, and 12 of pneumonia. The typhoid fever cases were scattered diffusely throughout the State. For the twenty-fifth week ending June 25 syphilis led all other reportable diseases, there being 42 cases. The following were the other reportable diseases in double figures, 35 of pulmonary tuberculosis, 35 of pneumonia, 34 of cancer, 23 of typhoid fever, 19 of malaria, 17 of diphtheria, 14 of scarlet fever, 13 of influenza, 13 of gonorrhea, and 11 of pellagra. For the week ending July 2, again syphilis, with 85 cases, led the reportable diseases. Pneumonia had increased rather remarkably for this time of the year, there being 54 cases listed. Thirty-seven instances of cancer were also reported, and 21 cases of malaria. Typhoid fever was reported in 35 instances, as well as 15 cases of pellagra, 36 of pulmonary tuberculosis, and 10 of diphtheria. Seven of the cases of typhoid fever were reported from Orleans Parish, but 6 of these cases were

imported from parishes outside of New Orleans. Two cases of tularemia were reported this week. For the week ending July 9 there was quite a marked increase in the number of cases of pulmonary tuberculosis reported, 77 being listed, and again strange to say very large number of cases of pneumonia, 73 being reported. Other reportable diseases reported include 45 of cancer, 23 of typhoid fever, 58 of pellagra, 14 of influenza, 15 of diphtheria. During this week there was one case of leprosy reported. For the twenty-eighth week of the year ending July 16, a very large number of cases of syphilis were listed, there being a total of 186, while gonorrhea was reported in 79 instances. A big increase in the number of cases of typhoid fever was noted, 59 cases being reported from the Parishes throughout the State, Lincoln Parish having 7; Caddo, 7; Natchitoches, 5, and Rapides Parish, 4. The remaining number of cases were made up from the other Parishes, in which one or two reported cases are recorded. Other diseases appearing in double figures are 35 cases of cancer, 12 of diphtheria, 27 of malaria, 16 of pellagra, and 39 of tuberculosis. One case of leprosy and one of anthrax were also reported.

NEW CANCER CLINIC

Dr. E. L. Sanderson, Superintendent of the Charity Hospital at Shreveport, has opened a new cancer clinic. The equipment for this cost \$20,000, of which \$11,000 was spent for 53 milligrams of radium. Physicians who wish to send patients to the hospital for radiotherapy should communicate with Dr. Sanderson before sending the patients, in order that accommodations may be provided for such patients in order of their application.

DEATHS

DeNux, Sylvain, Marksville, La.: Born in 1879. Graduated from Sewanee Medical College in 1900. Was a member of the Avoyelle Parish Medical Society and the Louisiana State Medical Society, and an active worker in organized medicine. Died in Marksville, July 5, 1932.

Gladden, Addley H., Monroe, La.: Born in 1865. Graduated from the University of Louisiana in 1888. Was a member of the Ouachita Parish Medical Society and the Louisiana State Medical Society until his retirement in 1929. Died on June 9, 1932.

Tuten, Joseph D., Lake Charles, La.: Graduated from Vanderbilt University in 1900. He was a member of the Calcasieu Parish Medical Society and the Louisiana State Medical Society. He was at one time a practitioner of medicine in New Orleans, but was a resident of Lake

Charles for the past twenty years, where he died on July 13, 1932, at the age of 54 years.

Dr. Paul J. Gelpi, New Orleans

The many friends of Dr. Paul J. Gelpi and the medical profession throughout the State will be greatly distressed to hear of his death on the nineteenth of July.

For many years Dr. Gelpi was an active and influential member of the Orleans Parish and Louisiana State Medical Societies. He was President of the Louisiana State Medical Society in 1922, and also a former President of the Orleans Parish Medical Society. Up to the present time Dr. Gelpi was Chairman of the Walter Reed Memorial Committee. He was a member of the Visiting Staff of Charity Hospital and Hotel Dieu. Dr. Gelpi is survived by his wife, six sons and three daughters, as well as four brothers.

A TRIBUTE

Died July 19, 1932, Dr. Paul J. Gelpi, a nobleman and a doctor.

A broken column, how many of us with saddened eye will gaze upon the past, and picture Paul, ever smiling, ever true, ever a friend, always a faithful worker in the ranks of organized medicine, ever anxious that the profession which was his, would stand forever in the ranks of mankind for the betterment of humanity. We, who worked with him in the ranks, will miss his counsel and his leadership.

Those of us who knew him best, realize that death was untimely in its work. Many an hour he spent when the fate of organized medicine was at stake, rallying the forces which ultimately placed it on the firm foundation which it now occupies. When time has mellowed the sorrow which now engrosses us, and we revert to those memories of him which endeared him to us, let us always remember, that medicine in Louisiana owes him a debt which time cannot efface.

Today let us feel with his suffering wife and family, to whom he was so devoted, and who loved him so tenderly, that he has gone to a reward which is given to one who has so unselfishly served his fellowmen.

H. E. B.

PAUL

Death, relentless, never asking, never giving,
Taking ever, from the meek as from the bold,
From among us glad and living
Takes away another noble soul.

Big of heart a friend, a fellow, good old Paul,
Ever ready, even anxious friend or foe to aid
He has answered, smiling surely, the Eternal Call.
Hush, bow down our head—our friend Paul is dead.

H. E. B.

DR. R. P. JONES.

"Whereas, we have recently felt the Will of the Omnipotent in the removal from our activity and his own life work of our interred friend and co-laborer, Dr. R. P. Jones.

Be it resolved, that we recognize the power of the Almighty.

Be it further resolved, that this Staff, in its association with Dr. Jones, enjoyed the stirring traits of manhood and professional integrity of which he was an exponent; that while we regret his passing we can cherish the memory of his personality.

Be it further resolved, that we extend sincere sympathy to members of his family and that copies of these resolutions be forwarded to his family and the medical press and recorded in the official records of this body."

Rufus Jackson, M. D.

Guy Riche, M. D.

W. H. Pipes, M. D.

Committee on Resolution.

Mrs. J. J. Ayo of Raceland, wife of Dr. J. J. Ayo, Chairman of the House of Delegates of the Louisiana State Medical Society, and also Chairman of the Lafourche Parish Democratic Committee, died at her home July 19, 1932. She is survived by Dr. Ayo and four children, Mrs. Harvey Peltier; J. J. Ayo, Jr., New Jersey; H. J. Ayo, Memphis, and Dr. J. B. Ayo of New Orleans.

CORRESPONDENCE

Chicago, July 7, 1932.

New Orleans Medical and Surgical Journal,
New Orleans, La.

Dear Dr. Talbot:

We read the Mississippi Section of your July issue with great interest because it contained so much purely local news. Dr. Lippincott's article and the several county society reports show he is an industrious editor—the kind that gets results. In fact, of the 32 State Journals for which we place advertising your Mississippi Editor supplied as much, if not more, local news than any other publication. And that's the kind of printed matter advertisers like because it demonstrates to them the Journal is read. We wish to commend Editor Lippincott's efforts. We are confident your advertisers will too.

Very truly yours,

Cooperative Medical Advertising Bureau
Signed: E. W. Mattson, Manager.

June 27, 1932.

Editor-in-Chief,
New Orleans Medical and Surgical Journal.
Dear Doctor:

It is a popular pastime to have the public solve difficulties. So I submit to you, Mr. Editor, a picture of two young men who were serving the great Charity Hospital of this city some **few years ago**, and would ask that you call upon organized



medicine to tell us who these handsome young men are.

I do not know who they are—but have reason to believe that this picture was taken sixty to seventy-five years ago, for it was found in a collection of pictures of that time.

Yours very truly,

Theodore Judimi.

July 7, 1932.

Dear Colleague:

This is a long communication for a busy man in the hot season. If you read it I believe you will understand its importance. Something must be done for, what we may call, the general practitioner or family doctor and the general special practitioner who may be also a family physician.

My long years of investigation forces upon me the conclusion that this education of the people and the profession must begin as a local affair in the County Medical Society and the local County Board of Health. Direction and stimulation should come from the State Medical Society and the State Board of Health. Expert advice and aid when asked for can come from the National Organizations, such as the American Medical Association, The American College of Surgeons, the American Society for the Control of Cancer, the American Public Health Association and the Federal Department of Health.

We must move more rapidly with placing before the public and medical profession the essential features of a family physician or a medical advisory clinic and periodic physical examination and immediate reports to physician or clinic after the first symptom.

The Editors of our great State Journals can force this education effort better than any other agency.

In regard to cancer—in view of the fact that its earliest stages in the skin, mouth and cervix

are curable by the proper application of small amounts of radium, all agencies must unite in seeing that properly trained Radiologists are supplied to every clinic using these small amounts of radium. The larger Cancer Clinic and Cancer centers are quite capable of training and providing these Radiologists.

I gather if the Radiologists were full-time it would hasten the desired results. I would appreciate your views. I am sorry to have given you this trouble. My recent visit to Europe made this message to you imperative, at least that is the way I was impressed. In any event, I believe I have sent you good news which Journalists always want.

Very sincerely yours,

Joseph Colt Bloodgood.

Editorial Note: With this above letter Dr. Bloodgood included a discussion on the chief controllable factor in cancer today. The article is too long for reproduction, but it was so suggestive and so pregnant with sane advice that one or two of the paragraphs will be reproduced here.

"I have personally studied thousands of histories of patients who sought the advice of the medical profession after they had been warned for some time. The striking facts in these histories are: These patients whose malignant disease can be diagnosed clinically, either have no family physician, even if they could afford it; they have not had a recent diagnostic survey, and the chief cause of delay after they become aware of their symptoms has been ignorance rather than fear. From the very beginning of my contact with people suffering from cancer, forty years ago, I have been impressed that those who came early in those days had family physicians in whom they had confidence, and whom they consulted the moment they had any symptoms. The outstanding fact of the people operated on for cancer and whose histories are reported in the Surgical Pathological Laboratories of the Johns Hopkins University and Hospital, and who are alive and free from recurrence today, ten to thirty years after operation, was that they all had a well trained family physician whom they consulted at intervals while they were well and always at once when they were not. From the very beginning of my studies of cancer of the oral cavity, the outstanding feature of the history was that the patient had not seen a physician for years, if at all. I am rather inclined to the opinion that the dental profession today could almost guarantee protection against cancer if their patients would submit to an oral examination as frequently as the Dentists think necessary. In this way all irritation from teeth and plates would be eliminated. If the patient used tobacco the moment an irritated spot appeared.

the dentist would recognize it in time and have the use of tobacco stopped.

"Up to 1900 in Halsted's clinic at Johns Hopkins, in the first one hundred cases, the incidence of cancer was more than eighty per cent; benign tumors were less than twenty per cent. Among the eighty per cent more than one-half were inoperable. Among the operable cases the chances of a five-year cure were less than twenty per cent, of ten-year cures less than ten per cent. No woman came for examination of the breast without a definite tumor for which operation was performed until 1900. In my clinic today the incidence of cancer is less than ten per cent; the group of benign lesions for which operation is not indicated has now reached almost eighty per cent. Now the majority of these one thousand women whose breasts were examined in the course of a physical examination or because they had had recent warning symptoms are mothers, and there should be a pelvic examination, especially an inspection of the cervix by a good light. The skin should be surveyed for definite lesions. The mouth, nasopharynx and nose should be looked at, and there should be a rapid diagnostic survey with a few laboratory studies. Should the general practitioner educate himself and prepare a proper examining room in his office for these diagnostic surveys, and the health departments, in cooperation with the local county, city or state medical societies, educate and influence the public to seek these examinations, the average physician would have more to do than when there was no health department and no preventive medicine. It is to be borne in mind that these periodic physical examinations and diagnostic surveys are not for cancer only, but the threat, the scourge and the possibility of cancer as a disease of neglect allows the medical profession and the health departments to employ it in influencing the public in regard to the necessity of selecting a clinic, or physician or hospital while well and submitting to a periodic examination at proper intervals, and a diagnostic survey the moment they are warned."

There is no question but that there has been a tremendous improvement, especially in this country and Canada, in disseminating correct information in regard to cancer to the medical profession and to the public.

We know that fully developed cancer, even with involved neighboring glands, has remained well twenty or more years after a proper complete operation. This is true of cancer of the skin, lip and oral cavity, larynx, breast, stomach, colon and rectum; malignant tumors of bones and soft parts. This group includes the most accessible to surgery. Today there are twenty-year cases of cancer after the employment of roent-

gen rays and radium. Hence the control of cancer is no longer an experiment. All the various activities of which the world has been kept pretty well informed have passed the experimental stage. Of course, there is much still to be done in clinical research, especially in relation to deep roentgen ray therapy and the amount and method of radium treatment for early cases of cancer of the cervix, skin and oral cavity. There is still hope that, by increasing the amount of radium in the form of a bomb to fifteen grammes and increasing the strength of the deep roentgen ray machine, we may accomplish a certain per cent of successes in what are not uniform failures, that is, late cases of cancer, metastatic carcinoma and localized early inaccessible cancer, such as in the oesophagus, lung and liver, and the early stages of cancer of the prostate of which there is a very large number of cases. There is remaining the most important effort to be carried forward in pure research into the cause of cancer and the specific and preventive treatment of the disease.

There has been so much written and published in medical and lay journals about cancer that both the general profession and the public are confused and do not clearly see what we actually know about the preventive and curative stage of cancer today; although there is no doubt that cancer of the skin, oral cavity and cervix of the uterus are preventable diseases; their prevention rests upon the selection of a family physician or clinic and periodic physical examinations throughout life. More and more people today are educated to see their dentist when the dentist suggests. The number is increasing of those who do not wait for symptoms to go and see their oculist. More persons are beginning to learn that deafness is due to neglect in not giving the specialist in nose and throat diseases an opportunity to correct and discover very simple infections and abnormalities in the nose and throat. To repeat, the most neglected periodic examination is that of the cervix of mothers. The majority of obstetricians have expressed their opinion in writing to me, that the prenatal clinic is the place to instruct mothers in prevention of diseases in themselves and in their children, but there are millions of mothers today who have passed the child-bearing period, therefore they depend upon a family physician or a neighboring clinic or a hospital to give them the same protection.

Even if every individual submits to an annual diagnostic survey, complete protection is not achieved until they are informed and influenced to seek the advice the moment they have any warning symptoms of the nearest physicians or clinic if they are near one or the other who made the last physical examination.

MISSISSIPPI STATE MEDICAL ASSOCIATION NEWS

L. S. Lippincott, Editor

Jacob S. Ullman, Associate Editor

D. W. Jones, Associate Editor

THAT WE MAY KNOW EACH OTHER BETTER

Dr. Ellis LeRoy Wilkins was born October 14, 1889, at Lewisburg, DeSoto County, Mississippi, to Louella Dickey and W. T. Wilkins, M. D. His

preliminary education was received in the public schools at Lewisburg and at "Randles University School" (high), at Hernando. He received his degree in medicine from the Memphis Hospital Medical College (University of Tennessee) in the class of 1911. He was licensed to practice medicine in Tennessee in 1910 and in Mississippi in 1911. Dr. Wilkins practiced medicine in Mississippi until 1914, when he moved to Dyersburg, Tennessee, entering the field of eye, ear, nose and throat, and with two other doctors, built the Hosmer Hospital at that place, where he remained until he entered service in the World War. He accepted a commission as first lieutenant in the Medical Corps on July 4, 1917; reported for duty at Camp Greenleaf on January

3, 1918; sailed for overseas on July 28, 1918, and was attached to base hospital No. 50, located at Mesves Hospital Center. On March 12, 1919, he was transferred to Base Hospital No. 208, at Bordeaux. On June 13, 1919, he sailed for the United States on the Alfonso 13th and was discharged at Camp Dix, New Jersey, June 27, 1919. He located at Clarksdale, Mississippi, in September, 1919. Dr. Wilkins is a member of the Clarksdale and Six Counties Medical Society, Mississippi State Medical Association,

American Medical Association, and the Southern Medical Association. His practice is limited exclusively to eye, ear, nose, and throat.

Dr. Wilkins married Miss Claire Elder, Olive Branch, Mississippi, on December 26, 1912. They have two children, Anna Lou, 17, and Sylvia Claire, 8. He is a steward in the Methodist Church, Clarksdale.

Dr. Wilkins' office is at Suite 403, McWilliams Building, Clarksdale.



ELLIS LEROY WILKINS, M. D.

Clarksdale, Mississippi

Treasurer, Mississippi State Medical Association

AN APPRECIATION

The Mississippi State Medical Assn. has a president. For something over two years now, your editors have been trying to secure the appointment of a local editor for each county of the state. That the proper editors might be chosen, the presidents of county medical societies were asked to make the appointments. Most of the presidents readily cooperated. Some unmindful of repeated requests, did nothing. Then it was that the matter was brought to

the attention of our president. Seventy-four of our 82 counties now have editors.

We now know where to go when we want results. Call James F. Acker, Jr.!

During the last month he has written 82 personal letters in behalf of our Journal. Your editors thank you, sir.

And now can we have editors for those other eight counties? Those missing are Chickasaw, Clarke, Coahoma, Kemper, Quitman, Tallahatchie, Tunica, Wayne. Will not the councilors in whose

districts the above counties are located, do a little work with the presidents of the proper societies? The Journal is an activity of our Association. It is a duty of councilors to see that counties in their districts function. May we not expect some help?

There is still a further problem for your editors. With county editors representing all parts of the state, the next step is to get those editors to be editors. There is a growing list of the faithful. We can count on them each month. But there are others who have accepted appointments, who are editors in name only. A part of those letters of Jim Acker went to them and there were results. Let's all work together. Let's have an issue of our Journal with every county in the state represented. And let's make it next month.

OUT-OF-STATE ESSAYISTS.

At the last meeting of the Mississippi State Medical Association, a motion was adopted instructing the Committee on Program to strike from the programs submitted by chairmen of sections all but one of the names of out of the state essayists for each section.

This is a wise provision. It is an honor to be invited to read a paper before the Mississippi State Medical Association. But it is an honor that is not appreciated by some men. At the Jackson meeting this year, thirteen out-of-state essayists appeared on the program.

The Association has many years had a rule, always plainly and in the printed program, that all papers submitted to the Association shall be its property.

Five of the thirteen essayists from out of the state failed to turn in papers, and have turned in no papers to this date. There are occasions when a man might want to make some revisions in a paper before publication, but such revisions should be made promptly and the paper then forwarded to the secretary of the Association. Also it is a courtesy to answer letters.

In order that there might be no misunderstanding, letters were written to each of the five essayists asking that their papers be sent. None of the five have seen fit to reply to those letters. The Journal is not in need of papers. Many good papers are being submitted every month. The disappointment is that men who were considered of enough prominence and standing to be especially invited as guests of the State Association should have so little regard for its customs and rules.

It would be well in the future for section chairmen when inviting out-of-state essayists to explain to them that they are expected to turn in their papers and that if they do not care to do this they should not accept the honor proffered.

FROM OUR PRESIDENT.

Please allow me to thank you as well as congratulate you on the very fine showing you made in the last number of the New Orleans Medical and Surgical Journal. I think I read every line of the Mississippi News, and enjoyed it immensely. After I finished with the Mississippi News then I read the scientific papers. You are going to make a great success of your section and the Association is to be congratulated on having you as editor.

With best wishes, etc.,

Jim Acker.

Aberdeen, July 9, 1932.

MEDICAL WRITING.

The task of the editor of a medical journal is not an easy one. Thinking medical men should write; many medical men attempt to write. And the regrettable part is that so many who attempt to write fail to recognize that the attempt is a failure. An article to be of interest, to command attention, must have a message. The readers of medical journals are usually busy men (or think they are). They could not read everything that comes to them if they wished. As a matter of fact most doctors are rather discriminating as to what they read. Most of them glance at the title of a paper. If it happens to strike them, they look at the conclusions. If these are interesting the article in question may be read.

The purpose of a medical journal is to present to its subscribers articles that will appeal to the greatest number—that will be read. Unless this purpose is accomplished to some degree, the Journal becomes "just another useless expense."

The editor is often in an unenviable position. If he turns down a paper because it brings out nothing new, because it is poorly written, because he knows it will not be read, the author is likely to think it a personal matter. If the editor publishes the paper he is put down by the majority as not knowing his job.

We have good papers and poor papers presented before our own State Association. We have the same kinds of papers read before our County Societies. It is our belief that we can improve all of our papers by a little more thought for our readers and a little more care in preparation.

The editorial policy of the press of the American Medical Association is recognized as authoritative in this country and abroad. A former editor and the present editor of the American Medical Association have written a little book—"The Art and Practice of Medical Writing," which has served us well. We have thought that our members of the Mississippi State Medical Association would appreciate and profit by the suggestions offered in that book. Accordingly, by the kind permission of one of the authors, Dr. Morris Fish-

bein, we shall quote from time to time certain paragraphs from this book in the hope that we may all do a little better and that by following the suggestions offered, Mississippi medical literature may become more outstanding and recognized as worthwhile reading.

"The writing and publication of articles on medical subjects play no small part in the making of a successful physician. It is by means of these that he becomes known outside his own community. Through the reading of papers before a society, he makes himself and his work known to hundreds; through his publications, to thousands. And, even more important, the writing of an article helps to make the writer better informed on the subject he discusses.

"He who would succeed must properly prepare himself in this branch of his work. Although the requirements for entrance to our modern medical colleges are such that the medical student should have had sufficient preliminary education to enable him to write a grammatical sentence of correct structure and with correctly spelled words, the experience of medical editors indicates that the majority of physicians either have not the ability or are too careless to do this.

"Three-fourths of the manuscripts voluntarily offered to the Journal of the American Medical Association are returned. What are the reasons for their rejection?"

(To be continued)

MISSISSIPPI STATE BOARD OF HEALTH.

HOUSE BILL No. 787

An Act Providing Penalties for Practicing Medicine or Surgery Without a License and Amending Section 1099 of the Mississippi Code of 1930.

SECTION 1. BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MISSISSIPPI, That Section 1099 of the Mississippi Code of 1930 be amended so as to read as follows:

1099. If any person shall practice as an attorney and counsellor-at-law, or shall practice as a physician or surgeon, or shall practice as a dentist, or shall practice as a pharmacist, without having first been examined and obtained a license as required by law, he shall, on conviction, of the first offense, be punished by a fine of not less than One Hundred Dollars (\$100.00) or more than Two Hundred Dollars (\$200.00) or by imprisonment in the county jail not less than three months or more than twelve months or both; and such person, upon conviction of the second offense against this Act, shall be punished by fine of not less than Two Hundred Dollars (\$200.00) or more than Five Hundred Dollars (\$500.00) or by imprisonment in the penitentiary not less than one year or more than two years; and such person, upon conviction of any succeeding offense, shall

be punished in the discretion of the court; provided, however, that such punishment shall in no case exceed the payment of a fine of Five Thousand Dollars (\$5,000.00) or imprisonment for five years.

SECTION 2. That this Act shall take effect and be in force from and after its passage.

APPROVED MAY 18, 1932.

The purpose of this law is to increase the penalty for practicing medicine without license. In several instances, illegal practitioners have paid small fines several times and continued to practice, seemingly regarding the fine as a privilege license. The larger fines may act as deterrents to those who would practice when not qualified or licensed to do so.

Dr. Robert Walter Rowland, Jackson, died on May 9, at Sanatorium. Cause: tuberculosis of lungs.

Deaths of Mississippi physicians during June, 1932: Dr. M. C. Armstrong, Jayess; Dr. W. I. Marsalis, Centreville; Dr. W. D. Beacham, Hattiesburg; Dr. N. H. Buie, Fayette.

Miss Gladys Eyrich, supervisor of mouth hygiene activities for the State Board of Health, is taking a summer course in health education at Columbia University.

Mrs. Myrtis Clements, secretary to the director of the Bureau of Industrial Hygiene, State Board of Health, has leave of absence for the summer months and is studying at Columbia University.

Dr. Hugh McCalip, Yazoo City, and Dr. Rosa May, Brookhaven, have just returned from Johns Hopkins where they have been studying for the past nine months. Both earned Certificates in Public Health.

Dr. D. V. Galloway, Clarksdale, has obtained a Certificate in Public Health after a year's study at Harvard Medical School.

The State Board of Health has arranged, through the Rockefeller Foundation, for fellowships for one year's study for the following men: Dr. J. T. Googe, Meridian; Dr. George E. Riley, Jackson; Dr. Archie L. Gray, Hazelhurst.

These physicians have choice of going to either Johns Hopkins or Harvard. Tuition and expenses to and from the school are paid, also a stipend of \$200 a month during the school year.

Under the Commonwealth Fund's program of cooperation with the Mississippi State Board of Health, the following young men were recently awarded undergraduate medical scholarships; Shelley Rice Gaines, Enid; Jesse Robert Hightower, Itta Bena; Merrell Odom Hines, Jackson; Frederick Lindsey Risher, Laurel.

Each undergraduate medical scholarship pays \$100 a month during the four years medical

course. This will make a total of ten boys in Tulane on scholarship at the expense of the Commonwealth Fund under its plan of cooperation with the Mississippi State Board of Health. Those who have already begun the study of medicine on scholarship are: James G. Blaine, Clinton; Paul Rogers Googe, Booneville; Edwin M. Meek, West Point; Onie P. Myers, Collinsville; Russell L. Welch, Norfield; Aubrey V. Beacham, Hattiesburg.

The State Board of Health held its regular meeting on June 27, 28, and 29. Medical examinations were conducted on June 28 and 29. Thirty-seven physicians were licensed to practice medicine. The following were licensed by reciprocity: Dr. John Alfred Beals, Greenville, from Louisiana; Dr. Hubert P. Clemmer, Ripley, from Louisiana; Dr. Rollin E. Cutts, Vicksburg, from Minnesota; Dr. Walter B. Hickman, Louisville, from Louisiana; Dr. Frank O. Schmidt, Ocean Springs, from Louisiana; Dr. William P. Tucker, Brookhaven, from Tennessee; Dr. Guy C. Verner, Jackson, from Alabama; Dr. James E. Wadlington, Biloxi, from Tennessee; Dr. Hiram B. Gimler, Toomsaba, from Tennessee; Dr. Alton R. Perry, Yazoo City, from Texas.

The following successfully passed the medical examinations and were licensed to practice medicine: Edward M. Anderson, Forest; John H. Barrow, Canton; Edward L. Gilbert, Scooba; George Y. Hicks, Vicksburg; Stanley A. Hill, Corinth; Frederick D. Hollowell, Jr., Yazoo City; Louis H. Jobe, Jr., Eupora; John G. Lilly, Jr., Tupelo; Daniel H. Moore, Quitmen; Abel V. Murray, Ripley; Hal S. Raper, Columbus; Edward A. Thorne, Holly Springs; Charles H. Wiggins, Memphis, Tennessee; Ransom W. Jones, Philadelphia; Earl W. Green, Leaf; Homer E. Howard, Winona; Charles A. Pigford, Meridian; Beverley E. Smith, Gulfport; Richard A. Street, Jr., Vicksburg; Hayden B. Sutherland, Booneville; Walter B. Trapp, Nettleton; Charles E. Ward, Oxford; Loys W. Willey, Morton; Robert C. Massengill, Brookhaven; Francis S. Dixon, Natchez; Toxey E. Hall, Shelby; Ernest C. Majure, Madden.

At this meeting of the Board, Dr. J. W. Dugger, who has been serving as director of the Bureau of Industrial Hygiene and Factory Inspection for the past four years, was elected for another four-year term.

Dr. H. C. Ricks was selected to serve in the capacity of director of the Bureau of County Health Work. Dr. Ricks will succeed Dr. C. C. Applewhite who has been transferred by the United States Public Health Service. The reduction in appropriation has made it necessary to discontinue the Division of Malaria Control. Also, no appropriation was made to continue the activi-

ties of the Bureau of Communicable Diseases. The Board of Health in choosing Dr. Ricks for the place as director of the Bureau of County Health Work realized that he will have more demands for his services than he can take care of, at the same time it is Dr. Ricks' desire to continue to be of service in the capacity of epidemiologist.

The two-year contract for biologics for the health department was awarded to E. R. Squibb and Sons, by the State Board of Health. Bids from five biological houses were submitted.

Felix J. Underwood,

State Health Officer.

Jackson, Miss., July 8, 1932.

YAZOO COUNTY.

Again our doctors have been keeping so quiet I do not get much news from them. Dr. H. M. McCapiy who has been at Johns Hopkins for nine months taking a course in public health work, has returned and resumed his duties as county health officer. Dr. A. B. Perry, who has been filling his place here, expects to stay in the same work.

Dr. J. D. Roberts has been on a visit to a schoolmate in Texas.

The rest of our doctors are rustling along trying to make ends meet and to make an—"honest living," a hard job.

C. M. Coker, County Editor.

July 8, 1932.

PANOLA COUNTY.

When the president of our Medical Association calls for us to do something it is time to make an earnest effort to comply with his wishes. I determined to make a search for news among the doctors of Panola County; while it is an extra scarce article I found out the following:

Dr. Best of Pope has returned home from a visit to his son in Shreveport, La. The doctor's health has improved enough for him to look after his practice.

Dr. Edwin Wright of Sardis has not been extra well recently.

Dr. B. H. Pasley of Como had the misfortune to lose a sister, Miss Miriam Pasley, who was a teacher in M. S. C. W. some years ago.

The wife and infant son of Dr. Spencer Wood of Algiers, La., are visiting his parents, Dr. and Mrs. G. H. Wood of Batesville.

Dr. J. M. Anderson of Sardis was chairman of a meeting of citizens on July 6 to organize a Tax Payers' League of Panola county. Dr. Anderson made a very earnest and able address outlining the purpose and necessity for the organization. I have thought the physicians of the state should give earnest thought and suggestions towards relieving our tax burdened people. We have had a committee on legislation in our state medical

society but they have been interested only in some projects to increase our state expense. As pride goeth before a fall, we might just as well realize that both state and personal pride will have to come down and what we call some of our cherished institutions will simply be a habitat for bats and owls unless some relief comes to our people.

G. H. Wood, County Editor.

Batesville, July 7, 1932.

A BOOST.

I feel that the entire Medical Profession in Mississippi appreciates your untiring efforts in their behalf, and I want to assure you as Councilor for this district that I am going to try to cooperate with you in this work.

Joseph E. Green.

Laurel, June 28, 1932.

A TRIBUTE.

The meeting of the Northeast Mississippi Thirteen Counties Medical Society at Amory on June 21, was fittingly dedicated to Dr. G. F. Bryan of Amory. The tribute was a great surprise to Dr. Bryan and came at the end of the banquet. The tribute:

"On one occasion, I was greatly impressed when I heard one of our truly great men and doctors, in expressing his great appreciation of an honor conferred upon him, use these words, 'there is no man living in the State whose attainments, ability or brilliancy can match this honor.' He had reference to the honor of being president of the Mississippi State Medical Association and those were his exact words in his presidential address. A slight change in this quotation would very nicely express the predicament I am in tonight when I try to really express my thoughts and feelings in the matter I am about to discuss. I am well aware of my inability to do justice to my subject, and in the words of my honored friend I know that I have not the attainments, ability or brilliancy to express myself as I would like. For that reason I have chosen to write what I have to say, rather than trust myself to speak what I have in mind and what my society would have me say.

"May I digress a minute to say that there are probably two other gentlemen in this assembly who know what I am trying to do. They know the object of my getting up but they have not the remotest idea of what I am going to say. I wonder what will be the thoughts of one member of our group. Regardless of my failure to adequately express the true feelings of the society, I know that when I have said what I have to say, it will be the unanimous desire of the Northeast Mississippi Thirteen Counties Medical Society that

this day and this meeting be dedicated to one of our most active and beloved members, a gentleman whose name I shall call later and who for many years has meant as much if not more to our society than any man in it.

"In 1903 this gentleman was secretary of his county medical society and that year attended the state medical meeting as a delegate. This, of course, was his first meeting. Since that time, twenty-nine years ago, he has missed only two of the state meetings due to sickness. I know of only once that he missed his local society meeting and that was because of a severe accident.

"No person can know this gentleman doctor and help but realize that through his many activities the medical profession has profited much. A survey of his life's history is most interesting and is typical of the life of many great men. He was born in 1863 at Aberdeen, the youngest of three children, his mother dying when he was less than one year old. For several years he lived with his uncle and aunt and experienced, as did many others, the poverty and hardships of reconstruction days. His father married again after which he, his brother and sister returned to his father's home. His first school was a private one, located on Meridian Street in Aberdeen and taught by a Mrs. Bullock. To his father however, is due the credit for most of his early education. He must have been an excellent teacher as later results have proven. Later he entered the University of Mississippi, but was unable to complete his literary course due to financial troubles. He taught school in the country near Aberdeen and thus secured finances enough to enter what is now known as the Medical Department of the University of Tennessee. He was graduated as valedictorian of his class in 1888. Under Dr. W. B. Rogers, he served as interne in a Memphis Hospital. Next came a practice of about fifteen months at Jasper, Alabama. Later he moved to Amory and in 1890 he returned to Jasper to receive the profits of his practice there, a bride in the person of Miss Mollie Little. There were six children from this union. Only two living daughters remain. Both of these young ladies are interested and have been engaged in public health work, this interest undoubtedly inherited from their illustrious father.

"Now my friends, I have made clear who the subject of my essay is, and whom our society loves and honors. After hearing these feeble expressions of appreciation of this truly great man, I move that in honor of Dr. Giles Sanford Bryan we dedicate this meeting, as a token of our affection and esteem."

Dr. Bryan was greatly touched and made a fine appreciative response.

HANCOCK COUNTY.

It seems we were supposed to have said something last month from the letters we have received for not doing it. Well, excuse me this time and I will try to say something again if this gets by. I did not receive my commission in time for last month's issue.

Will say our doctors are all poor, hot, and dry, but, while none of us were able to attend the democratic convention at Chicago, we are all satisfied, harmoniously so, with the new plank. Really believe we will elect the line up.

The Harrison-Stone-Hancock Counties Medical Society met July 7, in Gulfport at the King's Daughters' Hospital at 7:30 P. M. The meeting as usual was well attended and enjoyed by all present. We had a very interesting and instructive paper from Dr. E. B. Van Ness, the paper being discussed by the house. The remainder of the time was taken up with business, followed by a nice feed furnished by the good ladies of the King's Daughters' Hospital. We always have a good time at our meetings and there are but few of our members who fail to attend. If they could only realize what they are missing by their carelessness, we would all be there. It is unusual to observe the brotherly love as well as ethical cooperation manifested among the doctors of the coastal counties, especially those of Gulfport and Biloxi.

The parents teachers associations of Bay St. Louis, Waveland, and Lakeshore held their summer round-up on June 24 in the high school building at Bay St. Louis. The county health officer was assisted by local physicians and specialists from New Orleans, Louisiana, also public health physicians and nurses from Pearl River and Jackson Counties. Two hundred and twenty-five children were examined.

Dr. Paul Gelpi, New Orleans, is in Bay St. Louis now for a while taking a much needed rest. We are always glad to have the doctor with us.

D. H. Ward, County Editor.

Bay St. Louis, July 7, 1932.

PONTOTOC COUNTY

Pontotoc County was honored by a visit from Dr. W. A. Evans of Chicago one day this week. While Dr. Evans was reared in Monroe County, he tells us this is his first visit to Pontotoc. He says he is so favorably impressed with the first visit that he expects to return in the near future. Come again, Doctor. We are always glad to have you!

On June 21, the Northeast Mississippi Thirteen Counties Medical Society met at the Baptist church, Amory, with something over fifty mem-

bers present. Had a very interesting program and every member on program was present. This is unusual.

Very little sickness in this territory.

R. P. Donaldson, County Editor.

Pontotoc, July 8, 1932.

BOLIVAR COUNTY.

Dr. W. W. Hall, Jr., Shelby, was married during the month of June to Miss Louise Wilkinson also of Shelby. We wish them a long life of happiness and prosperity.

We are glad to announce the recovery of Dr. L. B. Austin of Rosedale, who has been absent from his office for a few weeks, and we hope that his recovery is permanent.

Drs. C. W. Patterson of Rosedale and J. F. Simmons of Skene, attended a staff meeting of the King's Daughters' Hospital in Greenville, during the month of June and enjoyed an instructive program by the Greenville doctors.

Dr. C. W. Patterson of Rosedale was a visitor to Memphis, Tennessee, recently, having gone to that city on professional matters.

C. W. Patterson, County Editor.

Rosedale, July 8, 1932.

ATTALA COUNTY.

During these unusual times we are passing through, it is a little hard for a fellow to get his system charged thorough enough to report any happenings that may occur. In June the Winona District Medical Society met at Ackerman where we had a very instructive and delightful meeting. The most delightful of all was the appetizing lunch (or dinner we country folk call it.) We are under obligations to the ladies for this enjoyable part of the program. We had one interesting case reported at this meeting. One doctor reported the history of a patient who had had fever for almost three years, but no appreciable loss of weight and the retention of a good appetite. After being examined and treated by several physicians over the state a diagnosis of undulant fever was made by the aid of laboratory findings; and the patient made an uneventful recovery when subjected to the usual treatment.

I am glad to report that Dr. W. W. McBryde of Ethel is improving after suffering about two months from an injury sustained in an automobile accident. He is out on crutches and we hope will be able to resume his practice. We have in prospect a fine feed crop, so if we can only declare a moratorium for about two years on our debts I believe we will get by.

C. A. Pender, County Editor.

Kosciusko, July 8, 1932.

NESHOPA COUNTY.

We were proud of the success we had at the last meeting of the East Mississippi Medical-Society, which convened at the most outstanding place in the state, "Neshoba County Fair Grounds." We had great pleasure in seeing our neighboring doctors wrestle over the drum sticks of chickens and grabbing the barbecued veal and mutton. The meeting was very fine and more than a hundred doctors and their wives were present.

The next meeting will be August 18, in Meridian, and we will be delighted to have doctors from our neighboring societies visit us.

Dr. Bailey of Meridian was a pleasant visitor in our city last week. He called on the writer while here. We are always glad to have him as well as other doctors visit our city.

We regret that Dr. Charlie Harrison is still having trouble with his head. He has undergone a serious operation in Jackson but he is able to be in Memphis. However, his mission is unknown to the writer.

Dr. Bernard Hickman of Louisville was a business visitor in our city last week.

Drs. W. W. Parks and M. L. Montgomery of Louisville were among the Rotarians who visited our club last month. You will be glad to know that a doctor can entertain a club with the ease and with that Dr. Parks used.

The Philadelphia and Hickman's hospitals of this place were visited by a member of the Charity Hospital Board, Mr. Crawford of Hattiesburg. I feel sure we will pass the requirements as all he could see was charity needs.

Dr. and Mrs. Granvill Hand of Quitmen visited home-folks here last week.

We regret that the health of one of Dr. R. J. Enochs' sons necessitates a change in climate. Dr. Enochs, who has been in charge of the Indian Hospital here, has been transferred to Kaynenta, Arizona, where he will have charge of the Kaynenta Sanatorium.

Dr. W. R. Hand was the guest of the writer at the last meeting of the Philadelphia Rotary Club, which was held at the fish pond of "Ab" DeWeese. Dr. Hand, like the rest, is now praising him for the wonderful time we had.

J. S. Hickman, County Editor.
Philadelphia, July 8, 1932.

ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY.

The regular monthly meeting of the Issaquena-Sharkey-Warren Counties Medical Society was held at Cary on Tuesday, July 12, at 7:30 p. m., the members of the society being the guests of the Sharkey County members and their wives.

There were present twenty-three members and six guests.

Papers and discussions, Dr. John E. Quidor, program chairman:

1. Congenital Syphilis.—Dr. W. C. Pool, Cary.
Discussed by Drs. E. H. Jones, Vicksburg and F. M. Smith, Vicksburg.

2. Our Guests.—Dr. John E. Quidor.

Discussed by Dr. L. S. Lippincott, Vicksburg.
Dr. Quidor closed.

3. Sodium Amytal in the Treatment of Eclampsia.—Dr. H. B. Goodman, Vicksburg.

Discussed by Drs. A. Street, Vicksburg; W. H. Parsons, Vicksburg; and G. W. Gaines, Tallulah, Louisiana. Dr. Goodman closed.

Dr. A. Street, chairman, reported for the committee appointed at the last meeting to study the sales tax as it applies to doctors and to make recommendations for its collection, that the sales tax is a privilege tax and that the committee did not feel that it was in order to put the tax on statements rendered to patients. The committee recommended that the tax be collected in some other way. On motion of Dr. E. H. Jones, seconded by Dr. G. W. Gaines, the report of the committee was accepted.

The secretary was directed to send flowers and a message to Dr. M. H. Bell, regretting his illness and expressing the hope of the society for his early recovery.

Dr. R. A. Street, Jr., Vicksburg, was unanimously elected to membership in the society.

There being no further business, the society adjourned to enjoy a banquet and entertainment furnished by the doctors of Sharkey county and their wives.

The next meeting of the society will be held at the Y. M. C. A., Vicksburg, on August 9 at 7 p. m. The committee in charge of program consists of Dr. A. J. Podesta, Vicksburg, Chairman; Dr. H. S. Goodman, Cary; Dr. H. H. Haralson, Vicksburg; Dr. C. W. Huey, Grace; Dr. G. W. Gaines, Tallulah; Dr. W. H. Scudder, Mayersville.

HARRISON-STONE-HANCOCK COUNTIES MEDICAL SOCIETY

At a special meeting of the Harrison-Stone-Hancock Counties Medical Society on June 27, a resolution protesting the appointment of a physician other than from the Gulf Coast as surgeon at Jefferson Davis Confederate Soldiers' Home at Beauvoir was adopted. A copy of the resolution was immediately telegraphed to Governor Sennett Conner at Chicago, where he was in attendance at the Democratic National Convention and a copy was sent to the secretary of the governing board of the home.

The meeting was held at the King's Daugh-

ters' Hospital in Gulfport. The resolution follows:

"WHEREAS, It has come to the attention of the Harrison-Stone-Hancock Counties Medical Society that the position of surgeon of the Jefferson Davis Confederate Soldiers' Home, Beauvoir, Miss., will be filled by the appointment of a physician not a resident of the Mississippi Coast, and

"Whereas, this institution had been built by and largely owes its adequate medical administration to Coast physicians, one of whom has always filled this position, several for many years without any compensation whatever, and that several Coast physicians, members of this Society, well qualified in every way are applying for this position; be is hereby resolved,

"That the appointment of any physician outside of this Coastal Area to this position be and is hereby emphatically protested and it is urgently requested that due consideration be given to those applying from this area and one of the same be appointed.

"Be it further resolved that copies of this resolution be presented to Gov. Sennet Connor, the Board of Trustees of the Beauvoir Soldiers' Home, Superintendent Joseph Havens of said home and to the press."

At the regular meeting of the Harrison-Stone-Hancock Counties Medical Society held at the King's Daughters' Hospital, Gulfport, July 6, the discussion relative to charity hospitals throughout the state was resumed. The members from the component counties of the Society are determined in an effort to secure the abolishing of the present state charity institutions with the intention of securing a redistribution of the charity funds to the various hospitals throughout the state that are doing the majority of charity work with little assistance from the state or counties.

A very interesting paper was read by Dr. E. Van Ness, the subject of which was "Diver-ticula of the Gastro-Intestinal Tract from the Radiologist's Viewpoint." The paper was very interesting, presenting very valuable information and was freely discussed and many questions asked bringing out additional data.

The son of Dr. Charles A. Bahn, New Orleans physician, while visiting in Biloxi, had the misfortune of being struck by an automobile which resulted in a fracture of the left femur. He was given temporary treatment at the Biloxi Hospital and later removed to New Orleans.

George F. Carrol, County Editor.

Biloxi,
July 13, 1932.

JACKSON COUNTY

Dr. J. S. Sharp of Grenada has been enjoying the cool breezes on the beach for a few days. Hope he will come again.

Because of the change in meeting time of the hospital staff there has not been any meeting since our last report. We meet Thursday, July 14, at 7:30 p. m.

Hope to have more news next time.

S. B. McIlwain, County Editor.

Pascagoula,
July 8, 1932.

WASHINGTON COUNTY

Miss Ethel Payne, daughter of Dr. A. G. Payne of Greenville, is touring California and will attend the Olympic games.

Dr. A. J. Ware, formerly county health officer of Washington County, and for the past four years superintendent of the Mattie Hersee Hospital at Meridian, has returned to Greenville to make his home where he will look after his plantation and planting interests.

Dr. T. B. Lewis of Greenville, has had as his visitor for the past week his brother from Arizona.

Dr. O. H. Heck of Greenville, has been taking a prominent part in all the golf tournaments which have been held over the Greenville Country Club links. He also participated in the Delta tournament helping Greenville to win the cup.

Dr. J. B. Hirsch was called to Valdosta, Georgia, last week to operate upon Mr. Marx Blum, formerly of Greenville.

Dr. Virgil Payne is spending some months in Colorado Springs, recuperating from his serious illness of last winter.

F. M. Acree, County Editor.

Greenville,
July 14, 1932.

SHARKEY COUNTY

Dr. and Mrs. E. B. Stribling, Rolling Fork, enjoyed the visit of their children, Mr. and Mrs. Sam Stribling of Waycross, Ga. Several social affairs were given in their honor.

Mrs. L. E. Martin, Anguilla, has all her family with her for the summer.

Mrs. M. J. Fern, Rolling Fork, is visiting friends at Marks. Many social affairs are being given for her.

Dr. J. R. Perry, Rolling Fork, has just made a short visit to relatives and friends at Philadelphia, Miss.

Friends from Virginia are coming the latter part of July to be with Dr. and Mrs. H. S. Goodman, Cary.

Cary,
July 10, 1932.

W. C. Pool, County Editor.

SIMPSON COUNTY

The Magee General Hospital at Magee was opened July 5, with Dr. W. W. Diamond in charge. Dr. Diamond until recently was the assistant superintendent of the Charity Hospital at Jackson. The opening of the hospital fills a need in this community and a rather wide territory will be served.

Dr. W. J. C. Wiemers of Sanatorium is spending his vacation with relatives in McComb and at camp on Lake Pontchartrain.

Dr. S. F. Strain of Sanatorium has just returned from a brief business trip to Memphis.

The Sanatorium Journal Club which convenes every Monday night has suspended its meetings through the vacation season. The next meeting will be held September 12.

S. F. Strain, Sanatorium County Editor.
Sanatorium,
July 9, 1932.

GRENADA COUNTY

Nothing unusual has happened in our county since my last visit. We have had excessive rains but a dearth of sickness. This is very fortunate all things considered. The doctors are all at their posts healthy, happy and hopeful. No changes in our ranks. A recent meeting of Winona District Association at Ackerman was very enjoyable. The local doctors and the good ladies were excellent hosts. They gave us a bountiful dinner which with a good company and good fellowship was a good start. A good program with good papers, good weather, good roads made of it a good day. We were signally honored at this meeting in having with us the President and an ex-President of the State Association. A number of visitors eminent in their several lines of work, were present and joined in discussions of papers read. Your scribe, as councilor for the District, made a few remarks urging all eligible ones to become members of the association. "In union there is strength." They need us and we need them. Doctors Clanton and Brown represented Grenada County. Our next meeting will be in Grenada in October. You are invited to be present.

Our beloved Dr. Young is still with us but is very feeble and a patient, uncomplaining sufferer.

You and your co-laborers are making the Journal very interesting and I for one give you my hearty thanks and appreciation.

With best wishes for continued success.

T. J. Brown, County Editor.

Grenada,
July 9, 1932.

ALCORN COUNTY

Dr. C. M. Speck, New Albany, was in Corinth this week inspecting Corinth and McRae hospitals.

Dr. M. W. Robertson goes next week as a delegate to the State Convention of the American Legion at Biloxi.

Graduation exercises were held in Baptist Church, Corinth, May 31, when a class of three trained nurses were given diplomas by McRae Hospital.

Dr. Dabney Hart, after serving two years as interne at Augustana Hospital, Chicago, is at home, not yet decided on location.

Dr. J. R. Hill, after serving Mississippi in the last Legislature, is back in harness and states the financial problem of the Mississippi doctors is harder to solve than that of the State.

Dr. Stanley Hill, son of Dr. J. R. Hill, having served his internship and successfully passed the Mississippi State Board Examinations, is studying locations.

Drs. Norwood and Gilbert are moving their office soon to Ray Building east of post office where they will have more room, specially arranged for them and better equipped.

Dr. W. A. Johns has returned from his vacation in Canada. While away he attended dedication services of George Washington Masonic Memorial, Alexandria, Va.

W. A. Johns, Alcorn County Editor.
Corinth,
July 9, 1932.

EAST MISSISSIPPI MEDICAL SOCIETY

An unusual meeting of the East Mississippi Medical Society was held on the fair grounds of Neshoba County, Thursday afternoon, June 16. Including members and guests there were sixty-six present. The following program was rendered:

1. Carcinoma, Its Treatment with Special References to the Use of Deep X-Ray Therapy—Dr. Willis Walley, Jackson. Discussed by Drs. I. W. Cooper and C. H. Harrison.

2. Tularemia—Dr. J. L. Parks, Union. Discussed by Drs. A. L. Majure and W. H. Banks.

3. The Doctor in the Court Room—Hon. Marion W. Reily, Meridian. Discussed by Drs. I. W. Cooper and B. L. Robinson.

Drs. F. G. Riley, W. J. Stribling and G. L. Arrington were appointed as a committee of three to study the case of a little boy with skin lesions about his hands, of several years duration. Dr. Riley, as chairman of the committee, discussed the case and gave as the diagnosis, pemphigus neonatorum, which has been very resistant to treatment.

Drs. Willis Walley, C. H. Harrison and O. A. Schmid were appointed to study the case of a little boy three years of age. Dr. Walley as chairman, reported lesions about the left ear and angle of the lips that could be successfully repaired by the proper procedure with plastic surgery.

Dr. G. L. Arrington explained that the annual appropriation for the Matty Hersee Hospital had been reduced to half and that there was only \$7,500 available for the remaining seven months of the year and that the hospital was now without sufficient equipment and supplies. He urged that the physicians cooperate with him and send only emergency cases to the hospital for treatment. He requested that physicians consult with those in charge before sending patients to the hospital.

Dr. Willis Walley of Jackson, made a somewhat similar statement in regard to the state charity hospital in Jackson.

Following the meeting everyone retired to the banquet hall and spent an enjoyable evening in the form of a delightful barbecue, given through the hospitality of the Neshoba county physicians. Dr. W. H. Banks served as toastmaster.

The next meeting will be held in Meridian, Thursday afternoon, August 18.

T. L. Bennett, Secretary.

WILKINSON COUNTY

Miss Mabel Richardson, superintendent of nurses at Field Memorial Hospital, spent several days last month at Houma and New Orleans. She reports a delightful vacation.

Mr. Hamilton Crawford, Hattiesburg, Secretary of the Board of Hospital Inspectors, came through here on an inspection of hospitals last month. Much can be learned from him on hospital administration. Hospital managers would do well to listen when Hamilton wants to talk. His visit here was thoroughly enjoyed.

Dr. S. E. Field made a business trip to New Orleans, Friday, July 1.

S. E. Field, County Editor.

Centreville,
July 9, 1932.

AMITE COUNTY

You are finally hearing a little something from Amite County. The doctors in the county are so few and scattered that news is of a necessity very scarce but I will try to do better in the future.

Drs. J. E. Hewitt, C. W. Stewart, and Paul Jackson recently attended a very interesting and instructive clinic in McComb, conducted by Dr. Willis C. Campbell of Memphis. Many in-

teresting cases were presented by Dr. Campbell and all who were able to attend were indeed fortunate.

Dr. H. L. Lewis, Street, was a recent business visitor to Liberty.

Our county health officer, Dr. C. W. Stewart, was a recent visitor to Liberty, looking after the health of the county.

Paul Jackson, County Editor.

Liberty,
July 8, 1932.

CENTRAL MEDICAL SOCIETY

At the regular monthly meeting of the Central Medical Society at Jackson on June 21, case reports were read on "Foreign Body in the Lung," first by Dr. H. F. Garrison, second by Dr. J. C. Walker, both of Jackson. These two cases were similar in that children inspired pieces of cat-tail or possum tail in the green state. In Dr. Garrison's case there were repeated hemorrhages from the lung, the patient had to be transfused more than once and is still in the hospital. In Dr. Walker's case, which he presented, the piece of grass worked out just below the scapula on the right side and was shown by the mother. It seems that this grass, which is very common in this particular section, has a tendency to work forward or to crawl and is extremely hard to remove by endoscopy. However, no such attempt was made in these cases; in fact the patients were not seen by endoscopists.

Dr. Lawrence Long read a case report of a foreign body, open safety pin, in the duodenum for thirty days, removed by opening the duodenum. There was a paper by Dr. W. F. Hand on "Sarcoma of the Pancreas." Dr. Robert Price, who has been sixteen years in China as a medical missionary, read an interesting and entertaining paper on some of his experiences in China.

At the business session, Dr. Julius Crisler, the President, appointed the following county editors: Yazoo County, Dr. C. M. Coker, Eden (reappointed); Madison County, Dr. Robert W. Smith, Canton; Hinds County, Dr. W. F. Hand, Jackson; Scott County, Dr. W. C. Anderson, Forest, (reappointed); Rankin County, Dr. W. H. Watson, Pelahatchie; Simpson County, Dr. E. L. Walker, Magee; Sanatorium County, Dr. S. F. Strain, Sanatorium; Smith County, Dr. R. B. Boykin, Mize.

The name of Dr. Guy C. Verner, recently of Birmingham, Alabama, was presented for membership. Dr. Verner's specialty is pediatrics.

Robin Harris, Secretary.

Jackson,
June 24, 1932.

LEST WE FORGET

"July 2, 1932.

"Dear Mr. Editor:

"Enclosed is the record of one of the four members who made the supreme sacrifice in the World War.

"I have a photograph of one of the others—Dr. H. T. Browne of Kosciusko—but nothing of his biography, except the place and cause of death.

"Of the other two—Dr. L. M. Kitchens of Strayhorn and Dr. J. H. Steen of Vaughan—I can learn nothing.

"Will you please publish this, in the hope that it will catch the attention of some members of their respective county societies who will be sufficiently interested to exert themselves in the matter.

"E. F. Howard, Historian."



HUGH DICKSON GAYDEN

Leland, Mississippi

Died of pneumonia at Traben-Tharbach, Germany, while serving in the army of occupation.

Dr. Gayden was born at Brandon, Miss., April 11, 1881. He graduated in medicine from Tulane, May 4, 1904. On November 8, 1911, he married Miss Annie L. McCombs.

CLAIBORNE COUNTY

After being absent from these columns for some months, we return to report the calamity which befell Dr. A. L. Chapman.

Early in June, Hermanville had a very disastrous fire, which destroyed the entire block in which was situated Dr. Chapman's office. He was able to save most of his stock of drugs and to secure office space in a nearby building, which enabled him to carry on with as little inconvenience as possible under the circumstances.

As events of interest to the profession occur

in our county we will report them through these columns.

W. N. Jenkins, County Editor.

Port Gibson,
July 2, 1932.

WINSTON COUNTY

Without more appropriations to the State charity hospitals, what are we going to do with our urgent surgical cases?

Our doctors in Winston County are so at leisure you can't find them when they are really needed.

Mrs. M. L. Montgomery, Marion, Jr., and Mr. and Mrs. E. N. Ballard of Starkville, and the former of Louisville, are spending the 4th in New Orleans—the wife and sons and daughters of the writer.

Dr. S. W. Pearson is spending a few days in Memphis, Tenn., this week on business.

Dr. W. W. Parks and Mrs. Parks, his wife, spent a few days at Greenville, visiting Mrs. Parks' brother and family. They enjoyed a fishing party while there.

Dr. E. L. Richardson spent several days at Moss Lake fishing a few days ago. He reports a successful catch and a good time.

Drs. W. B. Hickman, E. L. Richardson, W. W. Parks and the writer attended the last meeting of the East Mississippi Medical Society at Philadelphia. The two latter were accompanied by their wives who seemed to get some kick or thrill out of the meeting. It was a great day for all of us. We had a sumptuous eat on this occasion sponsored by the generous doctors of that county, and they sure had a fine dinner.

Dr. W. L. Richardson and the writer have been requested to write papers for the next meeting. Subjects have not as yet been selected.

M. L. Montgomery, County Editor.

Louisville,
July 2, 1932.

LEFLORE COUNTY

Dr. T. R. Austin, who recently graduated at Vanderbilt, has gone to Rochester, N. Y., to serve his internship at Rochester Hospital.

Dr. and Mrs. S. L. Brister, Jr., have returned from a visit to the home of Mrs. Brister's parents at Tuscaloosa, Ala.

We are glad to report that Dr. W. E. Denman is able to be out after a week's illness.

Dr. R. D. Dickens, of Greenville, spent Sunday in the home of his parents, Dr. and Mrs. W. B. Dickens.

Dr. J. P. Kennedy was called to Pinola to see his mother, who has been very sick, but now is much improved.

Dr. R. J. Peterson, who has been connected with the Matty Hersee Hospital at Meridian, has been visiting relatives in Greenwood.

Dr. R. L. Segrest and family of Wisner, La., recently visited relatives in Greenwood.

Dr. R. B. Yates and family have gone to Lake Chicot, Ark., for a week's outing. Before returning Dr. Yates will visit Memphis.

W. B. Dickens, County Editor.

Greenwood,
July 3, 1932.

LAWRENCE COUNTY

The Tri-County Medical Society met at Tyler-town, June 14, at which time a good program was rendered and those attending enjoyed the meeting, as we always do when we meet at Tyler-town.

Dr. and Mrs. D. T. Langston of New Hebron have the sympathy of the Society in the loss of their youngest son, who died at a hospital in Jackson.

Dr. G. S. Bryon, who has been located out from New Hebron in Jeff Davis County, has recently moved to Oak Vale, Lawrence County.

Dr. M. C. Armstrong of Jayess, Lawrence County, who was a first lieutenant in the United States Army during the World War, died at his home on June 25. He had been in poor health for some time but his friends were shocked to learn of his untimely death. His remains were returned to his old home at Arm for internment. He had many relatives and friends in this, his childhood home.

The next meeting of the Tri-County Society will be at Monticello on the second Tuesday in September.

B. S. Waller, County Editor.

Silver Creek,
July 2, 1932.

MONROE COUNTY

Well it is over. No, not the convention, but the Thirteen Counties Society meet. You should have been with us for, as usual, we had a great meeting. The program was good and every paper was read by its author in order. The discussions were liberal and worthwhile. Dr. W. L. Black of Memphis was our invited essayist. He brought us a fine paper and the friendly greetings from our Memphis brethren. Although it was oppressively hot and our territorial limits are wide flung, we had members in attendance from every county except on the extreme southern limit. We were very sorry to see several who were with us leave before the banquet was served. We had an abundance of food prepared and a most hearty welcome for many more than remained. Dr. I. P. Burdine of Amory did the

honors as master of ceremonies. He presided with ease and grace. There was abundant evidence of fraternal spirit. How splendid it is to meet and mingle with those we know and love. Several very pleasant and interesting talks were made by different ones at table. No dinner would be complete when Dr. W. C. (Daddy) Walker was present unless he should entertain those present with his poetry and eloquence. I hesitate to mention the last feature of the evening, and yet gratitude to and love for my friends constrain me to do so. Although I felt and still feel that I do not deserve it, the society by unanimous vote paid personal tribute to me, unworthy though I am. I could not express myself then—so I ask you to say for me that I love them all.

We were made sad by the fact that one of our loyal members as well as one of our foremost doctors was absent because he was, at the time, in Tupelo hospital contending with a ruptured appendix. I am happy to say that last reports are that he is coming fine. I refer to Dr. N. W. Nanney of Fulton, Itawamba County.

I am glad to say that I have heard of no serious sickness in the families of our Monroe County doctors since my last communication.

Dr. T. M. (Tom) Dye, our splendid state secretary, looked in on me for a brief moment one day early in this week. He looks to be well, happy and prosperous(?). I am wondering how one really should look if he happened to be afflicted with prosperity.

Rather too much rain just now for cotton. Weevils are already on the job. Corn and hay crops are promising.

I give public notice that our society will meet in Houston—a town and people famous for friendship and hospitality—in September. Those who fail to be there will deserve much pity.

"So long until (tomorrow)" later.

G. S. Bryan, County Editor.

Amory,
July 2, 1932.

UNION COUNTY

Dr. C. M. Speck, New Albany, has been appointed hospital inspector for the Northern District of this State. He, accompanied by Mrs. Speck, has spent several days this past month on a tour of inspection.

Dr. B. I. Trapp, New Albany, county health officer of Union County, attended the Rotary International Convention at Seattle, Washington.

Dr. and Mrs. H. P. Boswell, New Albany, will spend two weeks at Saluda, N. C., the latter part of this month, Dr. Boswell attending Southern Pediatric Seminar.

Dr. S. E. Eason, New Albany, has spent several days in Jackson this past month attending the meetings of the State Board of Health.

H. P. Boswell, County Editor.

New Albany,
July 1, 1932.

PRENTISS COUNTY

Dr. W. H. Sutherland attended the graduating exercises of the University of Louisville. His son, Dr. H. B. Sutherland, was a member of the graduating class.

Drs. W. H. Strange, W. H. Anderson, and S. L. Pharr attended the Northeast Mississippi Thirteen Counties Medical Meeting at Amory last month.

Dr. H. B. Sutherland was a visitor in Jackson June 28 and 29, where he took the Mississippi State Board examinations. He is a recent graduate of the University of Louisville and a member of the Theta Kappa Psi and Alpha Omega Alpha fraternities. He will be associated with the Sutherland Clinic in Booneville.

The Northeast Mississippi Hospital is undergoing extensive repairs and repainting.

Among the professional visitors to Booneville last month were Drs. M. W. Robertson, D. W. Hamrick, E. J. Green, R. E. Honnoll and H. G. Waldrep.

Dr. W. H. Anderson accompanied a patient to the U. S. Veterans Hospital, Memphis, on June 29.

R. B. Cunningham, County Editor.

Booneville,
July 1, 1932.

MARION COUNTY DALY-RAILSBACK

The marriage of Miss Eugenia Railsback, daughter of Mr. and Mrs. Charles S. Railsback, to Dr. George S. Daly of Columbia, formerly of Opelousas, Louisiana, was solemnized Saturday afternoon, May 21, at four o'clock at the home of the bride's parents on Louisiana Avenue, with the Rev. F. B. Gear of Columbia officiating.

A brilliant reception immediately followed the ceremony, after which the bride and groom left for points in the Northwest and Canada to be gone several weeks.

The bride is a graduate of McComb High School and Mississippi State College for Women. She has been an outstanding teacher of English in Junior High School for the past few years.

The groom is a graduate of Tulane University and is now practicing medicine at the Clinic Hospital in Columbia.

J. Gould Gardner, County Editor.

Columbia,
May 25, 1932.

TRANSACTIONS

June 24.

"Dr. L. S. Lippincott,

"Chairman, Publication Committee.

"Dear Doctor:

"The House of Delegates 1931 created a specific table of contents for the Transactions. This excluded the President's Address, and while I cheerfully grant the excellence of Dr. Culley's address this year I still fail to see the necessity for publishing such articles in both the Journal and the Transactions. By-Laws IX, Sec. 4, give your committee 'authority over all publications.' May I venture to suggest that you exert it in this direction in future? We are wasting money.

"Cordially yours,

"E. F. Howard."

YALOBUSHA COUNTY

Among the doctors from Yalobusha County attending the meeting of the North Mississippi Medical Society held at Holly Springs, June 18, were Drs. G. A. and L. S. Brown, and S. E. Cooper of Water Valley, and R. J. Criss of Coffeeville. A splendid program was very much enjoyed.

Dr. M. W. Jackson of Water Valley has been confined to his home with an attack of malaria. He has sufficiently recovered to resume his practice.

This is about all there is from Yalobusha this month.

George A. Brown, County Editor.

Water Valley,
July 5, 1932.

HINDS COUNTY

Dr. J. P. Wall, Jackson, speaker of the House of Delegates of the Mississippi State Medical Association, who has been confined to bed for about three weeks with thrombo-phlebitis of the right leg, is now able to be out again.

Dr. Guy Verner, of Birmingham, has recently opened offices in Jackson, Standard Life Building, for the practice of pediatrics.

The hospital staff meetings of July will be the last meetings to be held during the summer months. Staff meetings will be resumed in September.

Wm. F. Hand, County Editor.

Jackson,
July 5, 1932.

ADAMS COUNTY

A meeting of the board of trustees of the Natchez Hospital was held on July 5, to consider the question of balancing the budget in view of the drastic cut in appropriations.

Those present at the meeting were: Judge W. C. Martin, Chairman; V. H. Sharp, Mrs. Julia Hurchinson, Centreville; Mrs. Stanley Rills, Liberty; J. M. Reynolds, Meadville.

Dr. W. H. Rogers, who has been associated at the Charity Hospital in Natchez, left recently for Martin's Ferry, Ohio, where he has accepted a position as resident physician at the Martin's Ferry Hospital. Dr. Rogers is a general favorite in younger society circles and his departure to make his home elsewhere is regretted by a large circle of warm friends.

Dr. Francis Dixon recently returned to Natchez from New Orleans where he was a recent graduate from the Medical Department of Tulane University. Dr. Dixon will spend his vacation with his parents, Mr. and Mrs. Foggo Dixon, and other members of his family and will then return to New Orleans where he will be an interne at Touro Infirmary.

Mr. and Mrs. Layman Darling and young sons, who have been visiting for several weeks with their parents, Dr. and Mrs. J. W. D. Dicks and Mr. and Mrs. M. Darling, left recently by motor for their home in Old Hickory, Tennessee.

Dr. Charles Chamberlain left Port Gibson recently for Philadelphia, Pa., where he will intern at the Pennsylvania Hospital. Dr. Chamberlain has been an interne for the past year or two at the Newell Sanatorium at Chattanooga and recently joined his mother and sister in Port Gibson for a short vacation.

Mrs. Chamberlain, with her son and daughter, Dr. Chamberlain and Miss Mary Calhoun Chamberlain, visited in Natchez recently.

Dr. Francis Dixon recently took the Mississippi State Board examinations in Jackson.

L. Wallin, County Editor.

Natchez,
July 6, 1932.

PIKE COUNTY MEDICAL SOCIETY

At the meeting of the Pike County Medical Society at McComb on July 7, Dr. Willis Campbell, Memphis, was the guest lecturer. A most interesting and beneficial program was carried out. In the afternoon opportunity was given to confer with Dr. Campbell regarding any case in the practice of any of the members. Dr. Campbell was at the City Auditorium for consultation with physicians and observation and examination of patients physicians submitted to him.

Dinner was served at 7:30 p. m. in the sub-story reception room of the Centenary Methodist Church. Dr. Campbell lectured in the evening on "The Fracture Problem."

T. Paul Haney, Jr., Secretary.

SOUTH MISSISSIPPI MEDICAL SOCIETY

The President of our local Society, Dr. L. B. Hudson, has made the following appointments of county editors:

Dr. C. C. Buchanan, Hattiesburg (Forrest County).

Dr. R. F. Ratcliff, Lucerdale, (George County).

Dr. Aristophane Graham, Leakesville, (Greene County).

Dr. G. C. Terrell, Prentiss, (Jeff Davis County).

Dr. D. T. Allred, Collins, (Covington County).

Dr. D. E. Eddy, Heidelberg, (Jasper County).

Dr. J. E. Green, Laurel, (Jones County).

Dr. L. L. Polk, Purvis, (Lamar County).

Dr. J. G. Gardner, Columbia, (Marion County).

Dr. G. E. Godman, Poplarville, (Pearl River County).

Dr. B. T. Robinson, New Augusta, (Perry County).

Dr. J. B. Thigpen, Bay Springs, (Smith County).

J. P. Culpepper, Jr., Secretary.

Hattiesburg,
July 7, 1932.

BOARD OF HOSPITAL INSPECTORS

The Board of Hospital Inspectors, created by Senate Bill No. 491, at the last meeting of the State Legislature, is made up of Dr. C. M. Speck, New Albany, chairman; Miss Mary E. Dorsay, Greenville, and W. Hamilton Crawford, Hattiesburg, secretary. The committee organized in Jackson several weeks ago at a meeting with the governor, and made its report on July 12, after having made a thorough investigation of the thirty-eight hospitals under the terms of the bill. Notices of approval have been sent out to all hospitals qualifying.

W. Hamilton Crawford, Secretary.

LEAKE COUNTY

Dr. I. A. Chadwick, Carthage, has been appointed by Dr. W. S. Martin, President of the Leake County Medical Society, as editor for Leake County.

SOUTH MISSISSIPPI MEDICAL SOCIETY

The South Mississippi Medical Society met June 9, at Hattiesburg, with the following program:

"The Cancer Situation in Mississippi," Dr. R. H. Cranford, Laurel.

Discussed by Drs. Crawford, Martin, and McCormick. Dr. Cranford closed.

"Infectious Mononucleosis," Dr. W. A. Dearman, Gulfport.

Discussed by Drs. Oates, Culpepper and McCormick. Dr. Dearman closed.

"Treatment of Normal Breech Presentation,

and Eastman Medical Films," Dr. T. E. Ross, Jr. Discussed by Drs. Semmes, McKinnon and Green.

There were about thirty guests present at this meeting.

Dr. J. J. Tatum, Montrose, is confined to bed with a fracture of the lower third of femur. This occurred on July 2, 1932.

Dr. A. H. Harrelson is in the Newton Sanitarium critically ill.

Dr. Carlton Temple has recently completed a post-graduate course at Vanderbilt and is located at Hattiesburg where he will confine his work to pediatrics.

J. P. Culpepper, Jr., Secretary.

Hattiesburg,
July 12, 1932.

WARREN COUNTY

On July 12 the members of the Issaquena-Sharkey-Warren Counties Medical Society were the guests of the Sharkey County doctors and their wives at Cary, Miss. This meeting had been planned for some time and was held primarily as a compliment to Dr. Sam Goodman of Cary, the President of the Society. It was largely attended and the ladies served a most delicious supper and presented a most attractive entertainment. The scheduled scientific program was held, with Dr. Goodman presiding. It was a most enjoyable occasion and those who were absent missed a real treat.

Governor Conner has announced the Board of Trustees for the Mississippi State Charity Hospital located at Vicksburg. The board is composed of five members appointed by the governor, one appointed by the City of Vicksburg and one by the County of Warren. Governor Conner appointed Frank H. Andrews, Alexander Fitzhugh and R. A. Geary, all of Vicksburg, Paul Ratcliff of Raymond and Mrs. C. C. King of Jackson. The City of Vicksburg has appointed Dr. Sylvan Myers, Vicksburg, and the County of Warren has appointed Mike Morrissey, Vicksburg, on the Board. Mr. Frank Andrews was elected chairman. The appointment of superintendent has not yet been announced.

Dr. Richard A. Street, Jr., who recently graduated from Columbia University, and Dr. George Yerger Hicks, recent graduate of Tulane, both of Vicksburg, stood and passed the Mississippi State Board examinations during June and have been duly licensed to practice. Dr. Street will be connected with the Vicksburg Sanitarium for the next year, while Dr. Hicks is serving as an interne at the Baptist Hospital, New Orleans, La.

Dr. and Mrs. W. H. Parsons and their two children recently enjoyed a week's rest at Mont-eagle, Tenn.

Dr. and Mrs. Gus Street of Vicksburg are receiving congratulations on the adoption of a son, Robert McQueen Street, thirteen weeks old.

Dr. and Mrs. George Street recently spent a week visiting in Houston, Texas.

Dr. W. E. Aiken, formerly with the Vicksburg Clinic, is temporarily located at St. Joseph Infirmary, Louisville, Ky. After serving as resident physician there and taking post-graduate work, Dr. Aiken expects to return to Vicksburg.

Dr. Thomas P. Sparks, formerly of Jackson, is now located at the Vicksburg Clinic and Hospital.

Dr. Walter E. Johnston has returned from visiting his brother, Dr. Hugh Johnston, who has a fellowship at the Mayo Clinic. He will be associated in practice with his father, Dr. Sidney W. Johnston.

Mrs. W. C. Pool of Cary, State President of the Medical Auxiliary, was in Vicksburg on June 29 conferring with Mrs. Edley Jones regarding Auxiliary work.

Mrs. Lawrence Clark is enjoying a visit with friends in Atlanta, Georgia.

Five Vicksburg medical students are spending the summer in hospitals. Alston Callahan is serving as an undergraduate interne at the Charity Hospital at Natchez; Donald Hall and Luchion Landry are at the Vicksburg Sanitarium; and John Whitney and Vito Canizaro are at the Vicksburg Charity Hospital.

E. H. Jones, County Editor.

Vicksburg,
July 12, 1932.

AMERICAN PUBLIC HEALTH ASSOCIATION

The public health workers of Mississippi are interested in the Sixty-First Annual Meeting of the American Public Health Association to be held in Washington, D. C., October 24-27, with headquarters at the Willard Hotel.

The American Public Health Association occupies a unique place in the public health world. It is the corporate body of all the public health workers of the country. It is their organization, their clearing house, their source of information, their spokesman and advocate of sound working principles and standards in public health service, their avenue of personal contact so essential to individual growth and advancement, and their inspiration to keep going. The association represents the public health workers of the country and through them the trend, the quality and the progress of the health of the nation.

A number of other health organizations will hold their annual conferences at the time of the meeting of the American Public Health Association. This year the American Social Hygiene Association, American Association of School

Physicians, International Society of Medical Health Officers, Conference of State Laboratory Directors, Conference of State Sanitary Engineers, and Association of Women in Public Health, will hold their conferences in Washington at or about the same time.

Dr. J. M. Dampeer, Crystal Springs, former member of the Mississippi State Board of Health, died at his home July 14, 1932, after a lingering illness. He is survived by his widow, one daughter, Mrs. James Luper of Okolona, and one brother, L. M. Dampeer, Crystal Springs.

WOMEN'S AUXILIARY

The State Press and Publicity Chairman is in receipt of a most helpful letter and list of suggestions from the National Press and Publicity Chairman, that in part might be of interest to the readers of this section.

"In no other state has mutual helpfulness and mutual appreciation between State Medical Association and Auxiliary been greater than in Kentucky. Mrs. McCormack stressed the opportunity for each organization to advance the prestige of the other, and the advantage to the Auxiliary of friendly personal acquaintance with the editor of the State Journal. These happy relations were illustrated by the fact that in December, 1926, the Kentucky Auxiliary edited the Kentucky State Medical Journal."

This is one suggestion that the present publicity chairman will most certainly endeavor to follow, to the extent at least, of keeping friendly personal acquaintance with the editor of the Mississippi section of our journal. She will also try to make him appreciative.

Here is another splendid suggestion: "Ask the State President to urge each county auxiliary to appoint a local press and publicity chairman."

Please be careful in your selection of a chairman. The work of your state chairman is dependent upon the news and assistance given by local chairmen. It is important that the proper person with the proper amount of interest in auxiliary work be appointed, so that the work will go forward without delay.

"Read the Auxiliary pages of the Bulletin of the American Medical Association, and the State Medical Journal."

Read and be informed of the activities of your auxiliaries, local, state and national. Stimulate interest in others by asking if they have read the Bulletin and this Journal.

SHARKEY COUNTY

Preventorium Benefit Bridge Party
Mrs. W. C. Pool and Mrs. H. S. Goodman of

Cary, Mrs. E. B. Stribling, Mrs. A. K. Barrier, Mrs. M. J. Few and Mrs. J. R. Perry of Rolling Fork and Mrs. L. E. Martin of Anguilla, members of the Women's Auxiliary to the Issaquena-Sharkey-Warren Counties Medical Society, were hostesses at a benefit bridge party given in the home of Mrs. Goodman, during the month of June.

A very nice sum of money was realized from the generous donations made, and all above the annual pledge made (by the Sharkey County members for the preventorium, will be put into the milk fund for the Sharkey County schools.

CLARKSDALE AND SIX COUNTIES

Dear Mrs. Lippincott:

I am so glad that you are directing the editorial activities of our organization for I am sure it will help to strengthen the auxiliaries.

The auxiliary to the Clarksdale and Six Counties Medical Society only meets twice each year, but we will be glad to send you any news or items of interest which occur during the fiscal year.

The present officers of the Auxiliary are:

Mrs. James P. Walker, Lambert, President.

Mrs. L. H. Brevard, Dundee, Vice-President.

Mrs. J. E. Furr, Marks, Secretary and Treasurer.

Mrs. H. L. Cockerham, Gunnison, Parliamentarian.

The next meeting of our auxiliary will take place in Clarksdale in November, and I shall try to have a report of that meeting mailed to you.

Mrs. James P. Walker,

President, Auxiliary, Clarksdale and Six Counties Medical Society.

Lambert,

July 5, 1932.

FRIZELL-SARPHIE

Dr. and Mrs. W. H. Frizell of Brookhaven announce the engagement of their daughter, Elizabeth, to Mr. Jack Sarphie, also of Brookhaven.

The bride-elect is a graduate of the Mississippi State College for Women.

Mr. Sarphie is in business in Brookhaven and is a member of the Pi Kappa Alpha fraternity.

The wedding will take place some time in September.

WARREN COUNTY—VICKSBURG

Dr. and Mrs. H. H. Harralson and Miss Lois Harralson spent a week in Shreveport, Louisiana, the first part of July.

Dr. and Mrs. George Street and little daughter, Lois, spent the week of July 4th in Houston, Texas. Their other daughter, Pauline, is attending the Senior camp of Nakanawa, May-

land, Tenn., during the months of July and August.

Dr. and Mrs. W. H. Parsons and their two small daughters, with Mrs. Parson's mother, Mrs. T. P. Sparks, of Jackson, motored to Sewanee, Tenn., where they spent two enjoyable weeks at the Tuckaway Inn.

Dr. and Mrs. E. F. Howard are enjoying a ten days' visit from their daughter, Mrs. Loyd J. Kiernan, and two children, of Chicago.

Dr. and Mrs. Guy Jarratt have named their baby boy, born on June 20, Waring Black.

Mrs. Sidney Johnston and son, Dr. Walter Johnston, and daughters, Martha, Sidney and Frances, drove to Rochester, Minn., where they visited Mrs. Johnston's other son, Dr. Hugh Johnston.

Mrs. Lawrence Clark is now at home after spending a month with her brother and his wife in Atlanta. Mrs. Clark also visited in Birmingham.

"It was helpful and encouraging to us all to have such interest shown as that of the ladies of the auxiliary, and a splendid future for the association would be assured if the same interest were shown in every county."

The above is a paragraph from a letter sent by Logan McLean, executive secretary of the Mississippi Tuberculosis Association which held its annual meeting in Jackson, July 15.

Mr. McLean enclosed a clipping from the Jackson News reporting the meeting, with a list of officials attending. On that list were names of six members of the Issaquena-Sharkey-Warren Counties Medical Society Auxiliary, Mrs. W. C. Pool and Mrs. H. S. Goodman, of Cary; Mrs. Augustus Street, Mrs. H. H. Haralson, Mrs. Sidney Johnston and Mrs. Leon S. Lippincott, of Vicksburg.

There was also a large list from the medical profession: Dr. W. E. Noblin, Dr. Felix J. Underwood and Dr. H. C. Ricks, of Jackson; Dr. Henry Boswell, Sanatorium; Dr. T. P. Haney, Jr., McComb; Dr. W. H. Cleveland, Tupelo; Dr. W. R. May, Brookhaven; Dr. N. C. Knight, Indianola; Dr. B. D. Blackwelder, Hattiesburg; Dr. Loren Wallin, Natchez.

Mrs. Leon S. Lippincott,
State Press and Publicity Chairman,
Women's Auxiliary.

SHARKEY COUNTY ENTERTAINS

The Sharkey County members of the Women's Auxiliary to the Issaquena-Sharkey-Warren Counties Medical Society assisted the doctors of Sharkey County in entertaining the members of the Issaquena-Sharkey-Warren Counties Medical Society and guests for the regular monthly meeting, at Cary, on July 12.

The meeting was held in the High School building and after the scientific session of the society, the ladies served a bountiful banquet and furnished delightful entertainment. Music was furnished by the high school orchestra and Miss Robbie Goodman sang a number of delightful songs.

Mrs. A. K. Barrier, Rolling Fork, said the invocation. The entertainment included a tap dance by Mrs. Purdy Flanagan and Mrs. Ike Grundfest, and a skit, "An Evening in a Doctor's Office," written by Miss Elizabeth Flanagan, with Purdy Flanagan taking the part of the doctor and Miss Frances Goodman the part of the nurse.

The banquet was served by Mrs. W. C. Pool and Mrs. H. S. Goodman, assisted by Miss Ethel Goodman, Miss Elizabeth Flanagan, Mrs. J. Martin and Mrs. Bill Klaus.

The following doctors were the hosts: H. S. Goodman and W. C. Pool, Cary; E. B. Stribling, A. K. Barrier, J. R. Perry, M. J. Few and B. T. Orendorf, Rolling Fork

Mrs. Leon S. Lippincott,
State Press and Publicity Chairman,
Women's Auxiliary.

HONOR ROLL

The following have assisted in Mississippi's part of the Journal this month:

COUNTY EDITORS—L. Wallin, W. A. Johns, Paul Jackson, C. A. Pender, C. W. Patterson, W. N. Jenkins, T. J. Brown, D. H. Ward, G. F. Carroll, William F. Hand, B. S. McIlwain, B. S. Waller, I. A. Chadwick, W. B. Dickens, J. G. Gardner, G. S. Bryan, J. S. Hickman, G. H. Wood, R. P. Donaldson, R. B. Cunningham, W. C. Pool, S. F. Strain, H. P. Boswell, E. H. Jones, F. M. Acree, S. E. Field, M. L. Montgomery, G. A. Brown, C. M. Coker.—29.

COUNTY SOCIETIES—Central Medical Society, Robin Harris; East Mississippi Medical Society, T. L. Bennett; Harrison-Stone-Hancock Counties Medical Society, G. F. Carroll; Issaquena-Sharkey-Warren Counties Medical Society, L. S. Lippincott; Pike County Medical Society, T. P. Haney, Jr.; South Mississippi Medical Society, J. P. Culpepper, Jr.—7.

HOSPITALS—Vicksburg Hospital, Vicksburg Sanitarium, King's Daughters' Hospital, Greenville; Mississippi Baptist Hospital, Jackson; King's Daughters' Hospital, Brookhaven.—5.

OTHER CONTRIBUTORS—J. M. Acker, Jr., F. J. Underwood, Joseph E. Green, E. F. Howard, R. B. Dickins, H. A. Gamble, A. Street, R. A. Street, Jr., E. L. Wilkins, W. H. Crawford, Mrs. L. S. Lippincott, I. C. Knox, W. E. Aikin, Mrs. W. C. Pool, Mrs. J. P. Walker.—15.

GRAND TOTAL—56. THANK YOU.

BOOK REVIEWS

Story of Medicine: By Victor Robinson, M. D.
New York, Albert and Charles Boni. 1931.
pp. 527. Price \$5.00.

This is a charming narrative replete with original quotations. The historic panorama spreads itself through the centuries with medicine occupying the center of the scene. The style is delightful. Wide reading attests to the authority of the author. An excellent index with dates of birth and death of personages is appended.

I. L. ROBBINS, M. D.

Practical Treatment of Skin Disease with Special Reference to Technique: By Edward Ahls-
wede, M. D., New York, Paul B. Hoeber, Inc.
1932. pp. 798. Price \$12.00.

This treatise written primarily for the American and English Physician, takes for granted that the reader has arrived at a diagnosis and wants one of several methods of treatment for the patient. To one practicing general medicine it should be of some value. As a text for teaching or for the dermatologist, it lacks the modern procedure that has come upon the profession in the past decade. As a guide to the action of drugs and methods of application, it can be recommended. However, if one had only one book to choose for the diagnosis and treatment of skin disease, a text containing differential diagnosis, treatment and a complete bibliography would be more desirable.

M. T. VAN STUDDIFORD, M. D.

A Clinical Study of the Abdominal Cavity and Peritoneum: By Edward Meakin Livingston,
B. Sc., M. D., New York, Paul B. Hoeber,
Inc. 1932. pp. 866. Price \$15.00.

This is a most extraordinary volume. It is written in very clear, cursive English, which reads on like a continuous story, yet it contains more information than any other single volume, I believe, about the abdomen, its contents and its containing walls, with the anatomy, physiology and pathology not only of each separate structure, but of all the structures involved, the whole correlated and described in a way that makes one want to continue reading on to the end. What is true of the anatomy, physiology and pathology is also true of the medical and surgical application of this knowledge and the indications for and description of medical and surgical procedures. The illustrations cover every possible point and are of a very high order.

The chapter on eponyms takes up in a very delightful way a number of the more commonly known anatomical land marks, clinical syndromes, operative procedures, etc., that bear the name of some individual, such as McBurney's point, Meckel's diverticulum, Trendelenberg's position, and many others, giving a brief history of the

individual and a reproduction of the original article.

It finally closes with a questionnaire covering the entire text, rendering it the most complete post-graduate course of the abdomen and its contents that I believe exists on paper. It will well repay reading by any one doing abdominal surgery or interested in abdominal diagnosis and treatment.

J. A. DANNA, M. D.

Fundamentals of Orthopedic Surgery in General Medicine and Surgery: By Robert B. Osgood,
M. D., F. A. C. S. and Nathaniel Allison,
M. D., F. A. C. S., New York, Macmillan Com-
pany, 1931. pp. 311. Price \$3.00.

This book represents a series of lectures given by the authors at the Harvard Medical School in Boston. The first three chapters are taken up with introductions, reactions of developmental and adult bone and with nutritional and growth disturbances. Descriptions are simple and very interesting.

Then there follows lectures on cerebral and obstretical paralysis, scoliosis, tuberculosis and infantile paralysis.

There is a very instructive lecture on chronic arthritis and one on the relation of orthopedic surgery to industry.

I can heartily recommend this book to both students and teachers.

EDWARD S. HATCH, M. D.

PUBLICATIONS RECEIVED.

Charles C. Thomas, Springfield and Baltimore:
A Study of the Evolution of Cortical Dominance in Primates, by John F. Fulton and Allen D. Keller.
The Heart Rate, by Ernst P. Boas, M. D., and Ernst F. Goldschmidt, Ph. D.

Williams & Wilkins Company, Baltimore: *Accidents, Neuroses and Compensation*, by James H. Huddleson, M. D. *The Chemistry of Tuberculosis*, by H. Gideon Wells, M. D., Ph. D., and Esmond R. Long, M. D., Ph. D. *Quantitative Clinical Chemistry, Volume II, Methods*, by John P. Peters, M. D., M. A., and Donald D. Van Slyke Ph. D., Sc. D. *Medicine and the State*, by Sir Arthur Newsholme, K. C. B., M. D., F. R. C. P.

W. B. Saunders Company, Philadelphia and London: *Electrosurgery*, by Howard A. Kelly, M. D., LL. D., F. A. C. S., and Grant E. Ward, M. D., F. A. C. S. *Minor Surgery of the Urinary Tract*, by Hermon C. Bumpus, Jr., Ph. B., M. D., M. S. in Urology, F. A. C. S., Mayo Clinic Monographs. *Collected Papers of the Mayo Clinic and the Mayo Foundation Volume XXIII, 1931* *Manual of Clinical and Laboratory Technic*, by Hiram B. Weiss, A. B., M. D., F. A. C. P., and Raphael Isaacs, A. M., M. D., F. A. C. P.

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DIABETES MELLITUS—OLD AND NEW.*

G. W. F. REMBERT, M. D.,
JACKSON, MISS.

The present day understanding of diabetes mellitus and progress made in its study would appear to justify a review of its development.

From time immemorial emaciation, voracious appetite and excessive thirst have been observed and ancient physicians gave to the disease the name diabetes from the Greek word meaning, "I go through." But it was not until 1674 that Thomas Willis, the English physician, discovered that urine possessed in some cases a sweet taste and from that time diabetes was divided into two classes—diabetes mellitus (with sugar) and diabetes insipidus (without sugar).

About 100 years later, Matthew Dobson of Liverpool discovered that not only did the urine in diabetes mellitus contain sugar but the blood likewise and concluded that the sugar was not formed by the kidney but only excreted thereby.

The earliest record of sweet urine was in Ayur Veda of Surusta in 500 A. D., but a disease with polyuria was described by the Egyptians long before the time of Moses. It was Aretaeus in 150 A. D. who gave the disease the name diabetes on account of the rapidity with which the water flowed through the body and he well described the

marked loss of flesh, polyuria, lassitude, marked thirst and final collapse of the body, and considered it a form of dropsy. He recognized two stages, acute and chronic.

Hippocrates did not mention it in his writings in 400 B. C., but Celsus, in 30 B. C., described a disease the chief symptoms of which were polyuria and emaciation, but he did not call the disease diabetes nor did he account for the nature or cause of the trouble.

In Arabia, in the 9th century, Rhazes gave buttermilk and malt extract and advised the avoidance of physical and mental strain.

Silvanus in the 15th century believed the trouble was some disease of the blood and Paracelsus concluded that diabetes was the result of increased concentration of salt in the blood which served to irritate the kidneys.

The early history, then, of diabetes showed three sets of conclusions, as follows: Those of Aretaeus—regarding a form of dropsy; of Galenus—a disease of the kidney; and of Silvanus and Paracelsus—a disease of the blood.

The chief causes at that time were regarded as: Specific poisons, remainder of an acute disease, cold and wet, temperature and little resistance of the surface arteries, strain of night weather and drinking of large quantities of water, and sexual excesses.

The especial symptoms described were: Unquenchable thirst, great urination (more than fluid taken), the urine was considered to be an unchanged liquid, nervous pains in

*Chairman's Address. Read before the Section on Medicine at the Sixty-Fifth Annual Session of the Mississippi State Medical Association, Jackson, April 13, 1932.

certain parts of the body (due to certain salts), emaciation, collapse.

The prognosis was considered bad by all.

The early forms of treatment advocated were: Massage in the sun, hot and cold baths, steam baths, wine, whey, milk diet, thoriak, hiera, ipasix, applications of mastics and nostrums on the stomach, bleeding or venesection, narcotics, emetics, astringents, acids.

As stated, the real epoch in the diagnosis of diabetes was the work of Thomas Willis and Matthew Dobson in the finding of sugar in the urine and in the blood but there were other investigators whose conclusions did not coincide with those of Willis and Dobson.

Thomas Sydenham insisted that diabetes was a disease of the stomach. Morton, in 1698, considered it a form of tabes and classed it with phthisis. DeSauvage, in 1697, described seven forms of diabetes and he, as well as others, had numerous ideas as to cause.

Hofmeister claimed that for every person and for every form of sugar there was a limit of assimilation, above which an excess was eliminated in the urine.

From 1778 to 1866 the following discoveries and conclusions were reached: Cowley separated the sugar in a free state from the urine. John Rollo discovered that an animal diet not only reduced the quantity of urine volume but also lessened the daily output of sugar in the urine. Chevreul found that sugar in the urine differed from ordinary cane sugar but resembled grape sugar. Tademan and Gemelin found starch transformed into sugar in its passage through the alimentary tract. McGregor discovered sugar in vomited matter of diabetic patients and proved Rollo's contention that sugar was formed from starches in the intestinal tract and that animal food would be the proper diet for diabetics. Bernard proclaimed for the first time that animals as well as vegetables had a sugar creating power. Until then, all sugar in the body was be-

lieved to have come from starchy vegetables but it was then shown that sugar was not only formed in the intestinal tract due to pancreatic action but that the liver constantly made sugar and stored it in form called glucogene.

Bernard also found that glycosuria could occur from injury to floor of the fourth ventricle.

Harley discovered that diabetes could be artificially produced by exciting the liver with stimulants, as alcohol introduced directly into the portal vein, which was held to account for the fact that diabetes was more frequent in spirit-drinking countries.

Also, on account of the fact that stimulation of the liver will sometimes produce sugar in the urine and with normal liver action and normal liver sugar there can be an excess of sugar in the body and sugar in the urine, he thought there are two types of diabetes mellitus—namely, diabetes from excessive formation of sugar, diabetes from defective assimilation (malnutrition); and concluded that this would account for the fact that some diabetics gained both weight and strength on an animal diet with lessening sugar and urine volume, whereas others would show improvement in urine volume and sugar content and yet lose both weight and energy.

Bernard found that sugar was stored in the liver not only during life but even after death, or if a portion of the liver was removed from the body and kept at body temperature. He also found that before albuminous matter could be made into sugar it first had to be converted into glucogene or animal starch.

Chauveau and Harvey showed that the blood sugar was not burned off in the lungs but disappeared from the body during its transit through the capillaries and that the sugar was to nourish the body.

Brucke and Jones showed that sugar in small amounts was present in normal urine which proved Harley's contention that the disease was a matter of sugar concentration in the body.

Bernard, finding that animals taking albuminous food and having sugar in the liver, thought that the origin of all sugar in the blood was due to liver activity but Harley and Sharpey showed that it was also formed in the intestinal tract as well, and that the amount of sugar in the blood could be largely influenced by the diet.

Bernard further found that the liver sugar was very constant with an average of $1\frac{1}{2}$ per cent in dogs on an exclusively animal diet as well as on mixed food and on vegetable matter, showing liver sugar very little influenced by diet and he thought the percentage of sugar constant throughout, but this, too, was shown by Sharpey and Harely as incorrect.

As late as 1866 no definite pathology was known. Diagnosis was by physical derangement and excessive sugars which represented the results of the disease rather than the cause.

The disease had been found to be due to the following conditions:

Injury to head, with and without fracture of the skull;

Clots in pons varolii;

Softening of the base of the brain;

Abscess of brain extending into cerebrum;

Disease of the sympathetic nerve;

Tumor (the size of a nut) in the left lobe of cerebrum;

Tumor of the pneumogastric nerve;

Deposit of bony spicules in the falx;

Excessive brain work;

Intense grief;

Sudden mental shock;

Blow on the epigastrium;

Pregnancy;

Uterine disease;

Disordered digestion;

Exposure to colds.

Also, on account of being found in the same family, Mosler who reported a woman patient with diabetes mellitus whose father, mother and sisters had died of the disease, and three weeks after she came into hospital for treatment her 15-year-old son presented himself with the same trouble,

thought the disease due to traceable constitutional peculiarities.

It was about 1880 that attention was drawn to the pancreas as either a possible factor or the cause of the disease. Von Mering and Minkowski about this time performed the well known experiment of removing the pancreas of a dog, thereby producing diabetes, but they were unable to state why the removal of the pancreas caused the glucosuria without hyperglycaemia.

Lamcereux discovered a particular form of diabetes which was dependent upon a lesion of the pancreas and which was usually of rapid onset and was marked by polydipsia, polyphagia, polyuria, marked collapse and death.

Baumel then extended the theory of pancreatic origin to all forms of diabetes mellitus, and Lepine later announced that in the normal state the pancreas contributed to the destruction of glucose.

In 1892 Von Mering and Minkowski concluded that diabetes following removal of the pancreas was due to interference with some unknown function of the pancreas. Minkowski announced at the same time that he had succeeded in transplanting a portion of the removed pancreas of the dog outside of the cavity of the abdomen and that this prevented diabetes from developing but if the graft was later removed from the dog that diabetes would then develop.

In 1900 a new epoch developed in our knowledge of diabetes when Opie reported the results of his pathological studies of interstitial pancreatitis in which he demonstrated the connection between the disease of the islands of Langerhans and diabetes mellitus, and, in 1901, Sobelow, working independently, confirmed Opie's findings.

Later, MacCallum found that if a portion of the pancreas was separated from the rest of the gland and its duct tied, it atrophied and there remained a tissue containing enlarged islands of Langerhans. This was later proven by Moses Barron and others and served as the nucleus for the experiments and the ultimate achieve-

ments of Banting, Best, Fletcher and Collip in the development and perfecting of insulin.

Following the grafting of a portion of the pancreas into the abdominal wall of the dog by Minkowski in 1908, efforts were made by Williams with sheep pancreas, and Allen with pancreas of cat, in humans suffering from diabetes without success and in 1924 Williamson suggested the implantation of living pancreas into humans to prevent the development of diabetes.

Extracts of pancreas had been tried by Zuelzer, Forschbach, Leschke, Kleiner, Rennie and Fraser, Scott and Schulze with varying degrees of success but none of them spectacular.

The development from laboratory standpoint began with Willis's finding of sugar in urine 1674, Dobson's of sugar in the blood in 1776, Frank's yeast test for sugar in 1791, later urine sugar tests of Fehling, Benedict and others, Petter's discovery of acetone in diabetic urine in 1857, Kussmaul's studies in acetonemia in 1874, and with Stadelman in 1883, Minkowski, 1884, Magnus Levy, in 1899-1909 in their studies of beta-oxybutyric acid in relation to diabetic coma, of Van Slyke's studies of total acetone bodies in 1917, of Sorenson, Sellard and Van Slyke in 1918 for acidosis and ketosis and of Haldane and Priestly in 1905 and Federica in 1914 for alveolar carbon dioxide tension and the study of blood sugars with and without glucose tolerance tests have been necessary factors in the increasing knowledge of this disease.

Again, practically general acceptance of the fact that coma in diabetes is the result of acidosis due to beta-oxybutyric acid, diacetic acid and acetone in blood with interference with the normal alveolar carbon dioxide tension and that the occurrence of these bodies are the result of improper metabolism of the proteins and fats—either in the diet or from the body tissues proper—and that they can be regarded as due almost entirely to insufficient carbohydrate utilization, and which state is often precipitated or intensified by septic

complications arising in the course of the diabetes, has made it possible to better understand this condition and to more intelligently and successfully combat it.

The developments in the study of chemistry of foods and the recognized fact that the total glucose content of all foods is from 100 per cent carbohydrates, 58 per cent proteins and 10 per cent fats, whereas the total fatty acids are derived from 46 per cent proteins and 90 per cent fats have been responsible for the knowledge that to prevent the development of acetone bodies with the average diabetic it is necessary to maintain a fairly fixed ratio or proportion in the diet of the total glucose factors to those of the fatty acids. This ratio cannot be stated as accepted on a definite basis but most will agree that the proportion of total fats should exceed $1\frac{1}{2}$ times that of the total glucose although some workers have suggested as much even as twice as much fats as glucose but this proportion will not, in the majority of cases, be safe and acidosis or ketosis will very likely occur.

As stated, diabetic coma and diabetic acidosis are to be regarded as due to occurrence of diacetic acid, beta-oxybutyric acid and acetone—frequently following excessive fat ingestion and with an intake of too little carbohydrate—but in some cases of sepsis due to infection the acidosis will persist with fatal termination even though the acetone and beta-oxybutyric acid will have disappeared.

The incidence of coma has fallen greatly in that the death-rate was 61 per cent in 1914 whereas in 1929 it was only 11 per cent, but arteriosclerosis, according to Joslin, has increased from 15 per cent in 1914 to 50 per cent in 1926-29. This is believed due to the fact of the lessening of the coma death-rate and to the prolongation of life of the diabetic to an average death-age of 63.5 years and which is within the arteriosclerosis age-zone. Joslin also reports that practically every other diabetic in his series dies from arteriosclerosis in some form. It is especially prevalent among Jewish diabetics and children even show

evidences of arterial disease with changes in legs and in heart and many deaths from angina and coronary thrombosis have been reported in children and young adults. In these cases, the cholesterol content of the blood may be of especial value to indicate diabetic influence and a high fat diet is believed by many to be largely responsible for the development of vascular sclerosis and there is a steady increasing tendency on the part of most authorities to increase the carbohydrate allowance in the diet and correspondingly lower the protein and fats.

Wendt and Peck in discussing their series of 1073 cases of diabetes state that coma and arteriosclerosis are the chief complications. The former may be eradicated by educational measures plus insulin. The latter remains as the toughest problem and is the cause of the rising death-rate from diabetes. They further state that the death-rate in diabetes is still rising and that arteriosclerosis is the greatest problem now in diabetic management.

However, in the same period there has been a great decline in percentage of tuberculosis in diabetes and hardly any more deaths now occur in diabetics from tuberculosis than with non-diabetics in the general population at the same ages.

There are many complications in diabetes and Sevringhaus reported a series of 827 cases in which 681 (82.37 per cent) were complicated by one or more diseases so that in describing the disease it is rarely complete unless the complications are stated. Again, the treatment and outlook in each case is largely influenced by any complication present, and it is necessary to early recognize any complication present so as to successfully treat the disease. Diet is still arranged along empiric lines and varies in the case according to the particular exponent. There can be said to be a steadily growing tendency to increase the carbohydrate allowed in the diet and Joslin finds it advisable to give to the average adult 100 to 160 grams daily but the maximum rests with Sansum who gives 200 grams daily to average adult in beginning of treatment and this amount is sometimes increased to

as much as 350 grams. However, such large amounts of carbohydrate are necessarily fortified with large doses of insulin.

It can be said that the above liberal carbohydrate rations are especially to reduce to a minimum the development of arteriosclerosis but it remains to be seen whether noticeable reduction will take place in the incidence of this complication or sequel from such dietary arrangement.

There can be considered a rather consensus of opinion as to the daily caloric requirements and the amount of protein necessary but the fat content in the diet will vary according to the carbohydrates prescribed.

Insulin is to be regarded as the main coefficient of carbohydrate metabolism and while alcohol, intarvin, synthaline, myrtilin, Jerusalem artichokes and some of the yeast products and ferments are being advocated yet they can hardly be considered as more than adjuncts at best to insulin but cannot displace it.

As to when insulin is indicated in any given case will rest with that one in charge but Brower and Simpson's report of their series of 500 cases in which insulin was used in 60 per cent on discharge is noteworthy. They regarded ketosis present at time of admission or first examination a good evidence of the need of insulin and considered the absence of ketosis as an equally reliable indication that insulin would not be needed.

Insulin is not to be considered an absolutely harmless product for insulin reactions are frequent—often serious, sometimes fatal and insulin-edema and insulin-nephrosis have been reported. Also, in some cases of vascular sclerosis death has followed attacks of angina and coronary disease due to hypoglycaemia after insulin administration.

In closing, I shall quote at some length from Joslin:

"It would be wrong to give the impression that the treatment of diabetes is free from anxiety. It is both simpler and yet more complicated; simpler because the laws of diet and insulin are better understood;

more complicated because of the dangers of hypoglycaemia from too much insulin and exercise or too little carbohydrate, or because of approaching coma due to too little insulin. These children, charming though they be, and the adults whose cardiac incompetence is always in the background, still cause worry to the physician and even more than heretofore, because if death ensues it is so often unnecessary.

"What is the ideal amount of insulin for a severe diabetic? Enough to make him a happy and useful member of society. Few need over 50 units, and I do not think there are 10 patients among 2000, more or less, using insulin who are taking 60 units. Additional units give far less in return in carbohydrate assimilated. As a rule adjustment of insulin and diet will allow any patient, no matter how severe to take 100 grams carbohydrate. Obviously these remarks do not apply to patients with infections . . .

"It is not the quantity of insulin as it is the intelligence with which it is given. Less is required with good manipulation of the syringe, with variation of the site of the injection, with several rather than a single dose, with distribution of the dosage and frequency according to the time of day and when the blood sugar is highest. For these severe cases before breakfast and the evening meal and before retiring are the choice. Jonas has shown a noon dose is theoretically avoidable, and I have usually found this true. The distribution of quantity of carbohydrate to dose is not as necessary as one would imagine.

"Severe cases of diabetes cause the most worry at beginning of treatment. An infection, a gastrointestinal upset, a careless alteration of the diet, anxiety, over-exertion, a mild intercurrent disease, may favor the outbreak of coma."

And then dwelling upon the fact that it is essential that either the patient or nurse in charge should have a good knowledge of the nature, symptoms, course and treatment of the disease, he concludes with the following: "If a nurse is not available,

success in treatment depends upon the thorough education of the patient. The wise live long; the ignorant succumb early."

MODERN SURGERY ON ITS MARCH TO THE COUNTRY.*

W. H. ANDERSON, M. D.,

BOONEVILLE, MISS.

"Uneasy lies the head that wears a crown." Uneasy did lie the head whose hand wielded the surgeon's knife. And even yet the surgeon's pillow is not always stuffed with feathers of certain and peaceful ease. In the early days surgery was charged with hazard, pain, and fear. It was largely palliative, a grab at the last straw. The last twenty-five years has witnessed the hey-day of curative surgery. We stand at the sunrise of a new era, that of preventive surgery. Hence it is time to survey the accomplishments of the past and to look into the possibilities of the future.

The last half century has recorded more progress in surgery than all time previous. It has been the harvest time, so to speak. The pre-surgical decades built the more modern structure out of trials and tribulations, hardships and disappointments, a little clinical truth here and a little operative science there. In that age surgery was mingled with fear and insecurity, magic and stupidity, unexpected death and unlooked for recovery. It was often denied by the patient when imperative, and, maybe honestly, advised by the surgeon when needless. The fee was too often exorbitant or gratuitous. But out of all this chance and trial, magic and mysticism, selfishness of some and God-relying and priceless service of others, a science has emerged to bless man with a life, longer and larger and more certain.

Pasteur, Koch and Lister, immortal trinity, laid the corner stone upon which has been built the modern structure of aseptic

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and curative surgery. Since their observations, discoveries, and all but Divine insight, no other science has grown so rapidly as that of medicine and surgery. Its growth and development have been so rapid that no one man could keep up with it all. New discoveries and rapid growth gave rise to specialists and specialties multiplied. The specialists, generally speaking, has become specialized to the point of weakness, even as essential as many of them are. The "right legged" specialist knows not what to do with the left legged patient. From a financial standpoint the masses can not pay the price of the specialist for so many ills of so many organs. But the increased cost of a medical education makes it hard for the specialist to do it for less, especially in the expensive city.

We now have one physician to about every four hundred and fifty population in the cities. In Mississippi we have one active man to about fifteen hundred, and in some sections only one active man to three to four thousand. The surgical profession is even more centralized than the medical. The country and the small town have always constituted the back bone of every civilization. Many of the best of this population have moved to the city, largely on account of poor medical and surgical service at home. The concentration of our population in the cities, and especially our surgical population, has been a big factor in the high cost of surgical care. The point of saturation has been reached. The process of decentralization of our surgical population has already begun. And as it led much of our population to the city so it will now lead it back. This would be expected at the stage of our surgical development and also our economical conditions at this time demand it. Our great middle class must have standardized surgical service at a reasonable cost. The best in the essentials of surgery must be delivered to the masses in a practical and an economical manner. Much curative surgery is to be replaced by preventive medicine. Medical schools must be readjusted and their courses of instruction

overhauled. Medical education must be broader and the medical student in the beginning should have a professional mind, a surgical soul and a missionary heart. A few real specialists are imperative. They will always be. But the general surgeon broadly trained and with a projectile vision of preventive surgery is to constitute the backbone of the profession in the new era.

The decentralization of the surgical profession is largely the answer to the high cost of medical care. The new surgical centers should and must be the town from two to twenty thousand population. Here is where the surgical profession and the rank and file of the people who just want a plain operation without any frills may meet. The easy fortunes of "referred" surgery generally speaking will soon be history. The special city type who has had its easy dining in the forepart of the night, dancing in the after part, sleeping in the early morning, operating from ten to twelve and playing golf in the afternoon will soon be speaking of the good old days. Where necessity calls the surgical profession as a whole will go. Economy and human suffering are calling the congested surgical profession from the cities to the small towns and rural communities. We have reached the stage of development in our surgical profession and industrially that this may be done. What was once very special surgical knowledge is now common and electricity and the machine age make it possible to have a modern hospital at any cross roads. The reputation of the surgeon has depended too much on the size of the city in which he lived and the bigness of the fee which he charged, but this will not be the order in the future.

The true and noble surgeon loves to grow and develop and do research work and discover new surgical truths, likes to leave a name on the pages of surgical history as a reminder that he did his bit in the onward march of a noble cause. This can be realized quite as well now in the small town as previously in the city. We need to unify and utilize all medical knowledge from the neighbor nurse to the broadminded city

specialists. The machine age with the automobile, the locomotive, and the airplane are demanding better surgical service out on the firing lines of industry. Economy demands that the great expense of transportation and the hazard of time be eliminated. Hospital and surgical service can be rendered for less money in the small town. We are dealing with a nerve wrecked people living at a break neck speed. The little hospital in the quiet village where the smokeless air is made fragrant with mother nature's flowers, and the uncommercialized song of the liberty loving bird makes free and sympathetic melody all the live long day, is the place of choice for the patient of today. The personal attention of the surgeon and the sympathetic interest of the community also have their value in the small town. The quiet nights, the fresh food, and the invigorating air activate the healing of a tired wound.

The general surgeon in the country has felt that he could not do research work, that he could not keep abreast of the times, and if he should his efforts would not be recognized and appreciated. The general public is coming to look at it differently. The surgeon has not been altogether right in his conclusions. The discovery of ether as an anesthetic was the greatest boon to surgery. Crawford W. Long made this discovery. He was a country practitioner. The father of gynecology so to speak, Marion Sims, was for a long while a country surgeon. Banting at the time of his discovery of insulin, the time he gave birth to the idea, was an orthopedic surgeon in a small town. The country and the small town where services have been wanting offer the very best opportunity for the clinical study of the patient. The laboratory and roentgen ray are of the very greatest importance, but we need to renew our interest and devotion to the study of clinical symptoms of disease.

The cancer problem has not yet been scratched as to its cure. Early diagnosis and early operation are not enough. We are in need of more light. We may have to develop

a non-cancer human organism before we may claim the victory over this arch enemy of man. The country surgeon has an opportunity to study his patient in all of his social, psychological, and economical relations, to know him as he really is over a long period of time. And not only the patient himself, but his ancestry in many instances. These opportunities give the general surgeon in the small town an opportunity to study the cause of cancer that his city confrere might not have. We have been studying the germ, hunting him and chasing him like a rabbit for a half century. It was right that we should, but we have neglected a study of the human organism. This may account for the man who does not seem so able in technical knowledge surpassing his fellow surgeon who is, but who does not know "his patient." It is of the greatest importance for the surgeon to know his patient in all his relations. The added medical centers in the small towns will furnish this opportunity quite well.

Preventive surgery offers big opportunities for the future. Good obstetrics may prevent a large per cent of pelvic surgery. A well fitting shoe will eliminate a multitude of operations for bunions and corns. The circumcision of the baby may prevent several operations later as well as many infections. The operation of a hernia in the early years, may save one from obstruction in the aged.

The tendency to half of our diseases is inherited. Families die of heart disease, kidney, tuberculosis, pneumonia et al. Every observing practitioner must recognize this fact. By studying the anatomy and physiology of the individual, his immunity to disease and his psychological reactions as suggested by Draper, much may be done to steer him around them if begun in time. Preventive surgery, prevention of disease, the development of a human organism with increased resistance to disease and with a bigger volume of life, is the gigantic challenge to the medical profession. No man in any profession or in any walk of life has a greater opportunity than the country sur-

geon to add his bit to this great and noble undertaking.

There is no enmity toward the surgeon of the city nor the specialist. They are our noble co-workers. But there is a new and a better day for the general surgeon of the country and small town if he will only be courageous. As he gives the best service he can to the masses so will the medical schools or some humanitarian organization give aid to him. Dr. McCord has brought us post graduate work for the last few months of untold value. Councilor Dicks told you today of a county arranging for a post graduate course. The Commonwealth Fund is helping modern medicine on its march to the country.

Service to humanity, economy, sociology, progress in medical discovery, preventive surgery in its biggest and broadest sense are calling to the congested surgical centers of the cities for a divide of soldiers. We urge you of the city to investigate the opportunities the country and small town are offering the surgeon. And we say honor and glory and praise to the country surgeon who has held the lines against the odds through the years and has done the best he could for the love of service to a needy people.

SPINAL ANESTHESIA: THE USE OR NON-USE OF PRE-SPINAL STIMULATION.*

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Several months ago, when asked to read a paper before the Surgical Section of this convention, I chose the subject of spinal anesthesia, knowing full well that many articles had appeared in recent years, and that many more would be forthcoming. I considered, however, that some one should bring up this much discussed subject since I deem it one of great importance.

At the time I decided to write on this subject I was greatly interested in an

article of Dr. LaBat's which had just appeared in the September issue of *Surgical Clinics of North America*. This article brought out the opinion of the author that it was unnecessary to use any stimulant either prior to the administration of spinal anesthesia, or to administer any subsequently during the operative procedure. This statement was made with full consideration being given the drop in blood pressure which usually follows spinal injection. The author's opinion was that the Trendelenburg position was fully adequate to control all resulting pathological symptoms. The main point to be considered was cerebral anemia and not the drop in blood pressure.

Prior to this time I had used spinal anesthesia in approximately one hundred and fifty cases. The technic in these cases had been practically uniform in that novocain crystals dissolved in spinal fluid was the anesthetic agent, and that ephedrine sulphate, grains .5, had been given prior to the injection of the anesthetic.

These cases were done at Charity Hospital during the latter part of my stay there as resident surgeon, and since in all cases a record of blood pressure, pulse, etc., was not kept, I propose to use them only in a general way in drawing any conclusions in this paper. In the early part of October, 1930, I began a series of fifty cases, using the LaBat technic, with the exception that barbotage was not used, as I had found previously that I could get anesthesia uniformly to the costal border by simply injecting my solution with greater or less force.

The age range in this series was from six to sixty-five years. The drug used was novocain crystals put up in sterile ampuls. The amount of the drug used was varied to suit the individual as to size, age, and the length of the operative procedure contemplated. In several young children 60 to 70 mg. were used, the average amount was 150 mg. The site of spinal puncture was almost routinely the space between the third and fourth lumbar vertebrae.

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The spinal puncture was done with the patient lying on the side. As soon as the novocain was dissolved and injected into the spinal canal the patient was immediately placed in a Trendelenburg position, varying from twenty to thirty degrees.

Blood pressure, pulse and respiration rates were noted prior to the introduction of the spinal anesthesia. These observations were repeated at five to ten minute intervals throughout the operative procedure.

In twenty-four cases a drop of from 40 to 60 m.m. of mercury in systolic pressure was noted. In four cases there was a drop of 70 m.m., and in one case a drop of 130 m.m. This case had a blood pressure of 200 over 110 prior to the spinal. In eighteen cases there was a drop of under 40 m.m. The majority of these cases ranged from 20 to 30 m.m. The diastolic pressure showed a rather constant ratio drop; usually from 5 to 15 m.m. less than the systolic pressure drop.

The pulse, with few exceptions, slowed conformably with the blood pressure decline, maintaining the so-called normal blood pressure—pulse ratio which has recently been discussed by Johnson.²

Nausea and vomiting occurred in thirty-six out of fifty cases, but, with few exceptions, was easily controlled by having the patient take a few deep inspirations. Occasionally, when this symptom was aggravated, a five to ten degree increase of the Trendelenburg seemed to be beneficial. Bathing the patient's face with ice cold towels gave additional comfort. In this connection I wish to say that I have observed a much less marked degree of nausea and vomiting in the colored race and in children. Whether or not this is due to a less sensitive nervous system I do not know, but it would certainly seem that this factor plays a part. Another observation along this line is, that if one has a competent anesthetist to watch the spinal patient he can frequently forestall nausea and vomiting by directing the patient's attention to things foreign to himself. Taking

forty-five minutes as an average time for an operation, the blood pressure is usually stabilized at its lower level and shortly thereafter begins to rise back to normal. This point is an admirable feature of spinal anesthesia since the patient returns to his room quiet and relaxed with his blood pressure and pulse returning to normal. This is a striking contrast to many cases who have received a general anesthetic.

Following the completion of the above cases I ran a series of forty cases in which the variation from the proceeding technic was the addition of ephedrine sulphate, grains .5 to .75, given just prior to the spinal injection.

In reviewing this number we note that these cases showed from 15 to 30 m.m. less drop in blood pressure, and fewer of them complained of nausea or vomiting. The pulse showed less slowing, and in some cases was even accelerated above its pre-injection rate, although the blood pressure had dropped 10 to 15 m.m. less than in the preceding series.

In two cases of this series there was a marked drop in blood pressure, and in one case treatment had to be continued after the patient reached his room, where stimulation in the form of ephedrine was repeated, also solution of glucose given intravenously. The patient responded to this treatment and made an uneventful recovery.

Repeated stimulation did not stabilize the blood pressure; in fact, the pressure continued to fall back below the pre-stimulation level. I considered this patient to be a good surgical risk, and was surprised to note the extreme vascillations in blood pressure, which were as follows:

Pre-spinal pressure, 140/90.

Following spinal, 90/60—60/40—Ephedrine, grs. .5 given 85/60—60/0—70/40—.

In drawing conclusions from a comparison of these two groups of cases we are confronted with three main questions: 1. Is ephedrine necessary for the safety of spinal anesthesia? 2. Is ephedrine an entirely safe drug? 3. Does the greater drop

in blood pressure in these cases not having received ephedrine make any material difference in the immediate or remote condition of the patient?

I have thus far spoken only of the use of ephedrine as a pre- or post-spinal stimulant. Adrenalin chlorid is sometimes used, also strychnin and caffein sodio-benzoate. The consensus of opinion from recent literature seems to indicate that ephedrine is the most reliable stimulant, if any is to be used.

The action of adrenalin is fleeting and it has been found experimentally that there is an undesirable after depression effect.³ Caffein sodio-benzoate has no beneficial action on the cardiac output.⁴ Strychnin, although clinically thought to have a beneficial stimulating effect, has not proven so experimentally.⁵ Ephedrine, which seems to be most reliable in its stimulating effect, has been shown by Chen and Schmidt⁶ to be dangerous in certain types of heart conditions and when given in large doses.

An analysis of the series of cases, in which there were no stimulants used, showed no fatalities and no serious post-operative sequelae. In the series of cases receiving ephedrine there was an average drop in blood pressure of 20 to 30 m.m., only 10 to 15 m.m. less than in the first series.

A follow-up of these cases which as yet is not entirely complete, shows fifty cases with no symptoms of any importance referable to the anesthetic agent.

In conclusion, I would say that I think spinal anesthesia, using the described technic, with no circulatory stimulation, is safe and dependable. That the use of ephedrine or adrenalin is unnecessary, and that in some cases it may be harmful. I think that Saklad⁷ has so aptly summed up this point that I shall take the liberty of quoting him. "What conclusions should be drawn about a drug that is dangerous to use in cardiacs, that should not be repeated, that could only be used in minimum doses, that should not be used in the presence of a low blood pressure and in spinal anes-

thesia, and that has a marked tendency to disturb the normal blood pressure-pulse rate relationship, placing the patient in a condition closer to circulatory exhaustion?

"I feel that its use is based on an unfounded prejudice, and that it does not merit the place it has occupied in the hands of those employing it in spinal anesthesia. I feel also that its use is not only valueless but dangerous, and that no vasoconstricting drug will ever find a place in spinal anesthesia unless it has a specific stimulating effect on the sympathetic fibers to the splanchnic blood vessels and has no action or any other part of the circulatory mechanism."

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DISCUSSION.

Dr. S. W. Boyce (Shreveport): It would appear that the major technic of general surgery has probably reached near a standardization. It is only in the perfection of minor details by which we are able to reduce the morbidity and the mortality of surgical procedures.

We are here to discuss spinal anesthesia. In this paper we are limited to whether or not we shall use the beneficial or detrimental effects of ephedrin. I agree with the essayist that in using spinal anesthesia it is not serious enough to condemn or support the use of this procedure as to whether you use ephedrin or not; as to whether you use adrenalin or not. I believe the spinal anesthesia can be used safely without ephedrin, and I believe it can be used safely with ephedrin.

There are probably as many opinions on spinal anesthesia as there are doctors. If a man uses spinal anesthesia he has ideas on the subject. If he does not use spinal anesthesia it would seem that he still has ideas on the subject.

If we were to start out to evaluate the Einstein theory of relativity we would leave this to men

who understood it, and the adoption or the condemnation of spinal anesthesia should be left to men who understand completely the physics and physiology of its use.

Recently we have had the subject settled for us by McKittrick and his associates of the Eastern Division of the Surgical Department of the Massachusetts General Hospital. He submits a very scientific, and detailed, and honest report on the use of the drug there. However, I don't consider it entirely logical because he bases his conclusions on cases over forty-five years of age, and naturally that is the age in which we would expect bad effects and postoperative complications. Spinal anesthesia in his hands offers no advantages over the general. He reports in very honest detail his bad results and his deaths. He uses spinocain in a light solution, and uses novocain in the spinal fluid, which is heavy. In the report of his cases he has done some with the head up, some with the head down, and some horizontal, convincing anyone who is familiar with the use of spinal anesthesia that in his own mind he has never had a fixed idea as to the physics and physiology of a cocain synthetic drug when injected into the spinal dura. For that reason it is not fair to condemn or to laud spinal anesthesia when your technic varies in that way.

Some men, when they see the falling blood pressure following spinal injection, immediately interpret this condition as shock. This condition is exactly the opposite of shock. Spinal anesthesia is the best safeguard against surgical shock we have ever had. There is a falling blood pressure to zero but the pulse is not disturbed. In shock you have a falling blood pressure and a rising pulse. In spinal anesthesia you have a falling blood pressure and a falling pulse. The Trendelenburg position will restore the blood pressure to normal in a few minutes. As you know, the patient whose blood pressure falls to zero in surgical shock usually never comes out.

Personally, I endorse the use of ephedrin. The essayist has reported a series of cases in which there are fifteen to 30 millimeters difference with the ephedrin and without.

The only complication of spinal anesthesia which we have to fight is cerebral anemia. There was a time when the misconception of physiology said that respiratory and cardiac failure was the danger of spinal anesthesia. We know now that cerebral anemia is all we have to fight. If he raises the blood pressure fifteen and thirty millimeters of mercury, and has less nausea and vomiting, that in itself, to me, is endorsement of the use of ephedrin.

Saklad of Providence, Rhode Island, whom he quotes, reports a series of cases where with ephedrin the fall of blood pressure was thirty-eight

millimeters. Without it, it was sixty, indicating to my mind more cerebral anemia without ephedrin; for that reason more discomfort, and incidentally more danger.

The use of ephedrin, I think, is making a mountain out of a mole hill. To my mind, ephedrin is exactly like adrenalin. I have used ephedrin in cases that were not operated on. Inject this, and take the blood pressure every twenty minutes. There is no question in my mind but that there is a rise in blood pressure following ephedrin which is sustained from two to three hours, gradually returning to normal. I have done it repeatedly in cases with no operation to see the effect of ephedrin. Adrenalin does the same thing but it doesn't hold it up as long. Some people take ten mm. of adrenalin and are nervous. Some can take adrenalin and have no effect. Other cases I have operated on have had the same nervous phenomenon following injection of ephedrin. I would guard against overdoses and large doses of ephedrin in any case with organic heart disease.

If I had to operate without either, I would do it, but if I can depend on raising my patient's blood pressure from fifteen to thirty millimeters of mercury, lessen the discomfort of the nausea and vomiting, I think it is a good addition to the technic.

We once thought of cardiac and respiratory failure and accepted that as the proper physiology. Harry Koster and others have demonstrated that that was an error. Now Labat settles for us the question of splanchnic bleeding. He says the splanchnic nerve is paralyzed and your patient bleeds to death in his own splanchnic vessels. I want to predict, that in time this will go the same route as your cardiac and respiratory paralysis theory.

I have done stomach surgery where the blood pressure fell to zero. If that patient were bleeding to death in the splanchnic area we would have to get out of the gastro-intestinal tract to do the surgery. My observation has been that in stomach surgery you get the same falling blood pressure in stomach and intestinal fields as you do in the general fields, and if your patient bled to death in his splanchnic area you would have to operate on his legs or somewhere else. I predict that the time will finally come when we will see that the patient doesn't bleed to death in his splanchnic area, but he has a general stasis of his blood stream due to the relaxation of the muscles in his general arterial system. If you will let his head down to keep the blood going to his brain, you will take care of this.

Dr. P. Jorda Kahle (New Orleans): There are only two points in Dr. Snelling's paper that I really want to take up, because we can hardly go into a discussion of spinal analgesia in the

limited time we have. Before taking up those two points I want to say one word.

We have with us Dr. Chassaignac who has been the pioneer and the dominating influence in the use of spinal in our clinics and in private practice. As a result of his judgment and his faith in the method, we have a series of over 6000 cases covering a period of twenty-odd years. I believe if it had not been for the teachings of Dr. Chassaignac and his confidence, and that of Dr. Delaup, we would probably not have used it in face of the adverse criticism that spinal was receiving everywhere.

In reference to the points taken up by Dr. Snelling as to the use of non-use of pre-spinal stimulants, I dare say in over 4000 cases, possibly close on to 5000 cases, we had not used either in private cases or in our clinic any pre-operative stimulant. We depended largely, in the case of a marked fall in the blood pressure, on aromatic spirits of ammonia intramuscularly with a view of stimulating the respiratory centers. How much good it did, I don't know.

I might mention also that for years the fear of anemia of the bulb and of paralysis of cardiac and respiratory centers led us to have our patients with the head and shoulders elevated. I recall many an instance when the patient was almost at a forty-five degree angle. We have used a chair on the table to elevate the patient to prevent this diffusion.

I believe it was some ten years ago, in operating on some of these patients with rather large abdomens, in doing cystotomies, and with a view of facilitating the operation, we used the Trendelenburg position and found that these patients not only did not show any deleterious effects of the drug used but actually did better. For the last ten years or so we have used the Trendelenburg almost exclusively.

I don't believe that there is any doubt that the danger from the fall of blood pressure which does occur in spinal is anemia of the bulb and consequent paralysis of the respiratory and cardiac centers. The treatment is essentially the Trendelenburg position.

In the past four years, in a series of practically 1000 cases, maybe more, we have used ephedrin routinely. We have felt that the use of ephedrin brought within the range of application, you might say, of spinal, patients with low blood pressure, a large number of whom otherwise, we would have hesitated to operate. We have used it routinely and have seen no bad effects. I don't believe there is any doubt that ephedrin will raise the blood pressure. We have not taken the blood pressure in all cases, but we have observed it in a number, especially when we were first using it. We have had patients with a blood pressure of

eighty or ninety, patients who were then considered unfit for spinal analgesia, in whom the blood pressure following operation had risen to 120 and sometimes 125. I feel, whether rightly or wrongly, that ephedrin can be used to advantage. I believe it tends to prevent the nausea, that Dr. Snelling has mentioned, by maintaining the blood factor in the use of spinal.

I believe the essential thing to remember is the Trendelenburg position, which is the safety factor in the use of spinal.

To digress a little bit, before coming up on the platform one of my colleagues asked me whether we put the patient in the Trendelenburg position immediately on giving the spinal. I have no hesitancy in saying that we absolutely do. We have no fear of diffusion, feeling that the drug is fixed by the nerve tissue, possibly a good bit of it excreted, taken up by the general circulation, some of it probably leaking through the arachnoid wound. I have yet to see (I shouldn't boast) the analgesia spread to the scalp. As a general rule, depending on the amount given and the force with which the solution is injected into the spinal canal, we can almost limit the height of the analgesia.

Just one word about spinocain. We have had very little experience with it personally, but our impression is that spinocain has no advantage over any of the other methods of administering the drug into the spinal canal. The reason spinocain has apparently been more successful is due to the fact that the patient must be put in the Trendelenburg position, and that possibly the blood pressure has been raised by the use of ephedrin before the injection is given.

Dr. H. B. Alsobrook (New Orleans): There are one or two points I would like to stress in spinal analgesia. One is the immediate Trendelenburg position. Dr. Snelling and I don't have exactly the same technic, but it is very similar.

(Drawing) During the last year I have used this technic in using spinal. Instead of having the patient's legs over the table in this position I use shoulder braces and have them lie in this position, always throwing the volume of blood to the bulb. Our ratio of nausea and vomiting is one to five. About one case out of every five has some nausea and vomiting. The one thing I want to stress more than any other is the technic. It isn't every man who can make a spinal puncture, who can give a spinal analgesia. I can best illustrate that by what I saw happen in one of the private institutions in our city about two years ago.

A man had a case scheduled for appendectomy under spinal. He walked into the operating room and there were some five or six of us scrubbing up. He said to the intern, "Doctor, go give the

spinal for me." The intern had never given a spinal in his life and had only seen three or four. He said, "I have never given one either, but we have got to give this patient a spinal." That is exactly why spinal has fallen into disrepute. Give a man chloroform and a mask and he can give an anesthetic, but they cannot do the same thing with spinal.

The technic in spinal, in my opinion, I am not an anesthetist, requires more precision than when administering general anesthetics with the best of machines. In our service at Charity Hospital we use it exclusively. I use it exclusively in private practice in any case below the diaphragm. It is gratifying to see patients come back, if they have to be reoperated, and want this type of analgesia. The other gratifying thing is that some four or five years ago we would go to the Charity Hospital and maybe see one man's name on the board for a spinal. We go there now and if it is a general somebody is commenting on it.

The two things I would like to drive home are the immediate Trendelenburg position and the technic of the spinal.

I think Dr. Snelling is to be congratulated on this excellent paper he has brought us. As to the use of ephedrin, use it routinely where the blood pressure is less than 150 systolic. As a pre-operative we give our patients an ampule of caffein sodium benzoate as they come from the room or the ward. That has seemed to help them. If there is any fallen blood pressure we usually give them a little aromatic spirits of ammonia or, as Dr. Snelling has said, use cold towels, assuring the patient that he will be all right. In my private practice I have an anesthetist who talks to the patient and takes the blood pressure. I haven't as large a series as Dr. Snelling, but my cases are averaging about six millimeters fall in blood pressure systolic.

Dr. O. C. Cassegrain (New Orleans): It has been very delightful to hear Dr. Snelling's paper on this interesting subjects. Spinal anesthesia today is the anesthetic of choice in nearly all cases. It is the fad, if I might use the expression. You see more spinal used in any operative difficulty in any large clinic than any other type of anesthesia.

However, I don't believe we should overlook one fact, and that is this: that while spinal anesthesia is a very excellent type of anesthesia and gives very excellent results, we mustn't forget it is not universally applicable. For example, I am convinced that in cases that can be operated on in thirty minutes or less, if the patient is in good physical condition, probably a short gas anesthetic is better, less fraught with danger—I say, if the patient is in good general condition. If the operation is of a type that will lend itself to local, I

think then of course local should be the anesthetic of choice because while for many years I used to laugh at some of the objections that were made in the use of spinal I had two experiences in the last three months which will show you that some of the objections raised do occur.

I have done nearly 1000 punctures under spinal and yet a very unusual complication, or accident rather, which I have heard discussed but used to pooh-pooh all the time, happened to me twice in three months, a broken needle in the spinal canal. I don't think that happened because of any lack of experience in the technic. As I say, I have done probably over 1000 punctures and yet in the last three months this complication happened to me twice. So while the spinal is riding the crest of the wave of popularity today, I am convinced that local must, when feasible, still be considered the anesthetic of choice for operations requiring less than thirty minutes in patients that are in good physical condition. Under such conditions a short anesthetic, preferably with gas, is still to be considered probably preferable to spinal.

As to the point Dr. Snelling brought out about the use or non-use of a stimulant for the blood pressure, I believe it is absolutely immaterial whether you use ephedrin or not. I have used ephedrin because I have, in the last two or three years, followed the technic of Pitkin who uses spinocain, which is a solution lighter than the spinal fluid and which I believe will lend itself to a limitation of the level of anesthesia better than the heavier solutions or the solutions with the same specific gravity as the spinal fluid. I believe with spinocain you can more accurately limit your height of anesthesia, or your level or anesthesia, than with any of the other anesthetics. Of course it doesn't make any difference actually, as far as the anesthetic property of the drug is concerned, which type of anesthetic agent you use because after all spinocain or neocain, or any of the other cains, are all nothing but novocain under different names. Different houses put up novocain and give it other names. Spinocain is novocain so treated that it is lighter than the spinal fluid, so I don't believe it makes much difference whether you use ephedrin or not. I am convinced that blood pressure makes no difference at all in the prognosis of the operation that for the last nine or ten months we have even stopped taking blood pressure readings. We used to do it regularly every fifteen minutes. In the last eight or nine months we don't do it at all and have had no cause to regret not doing it.

I want to thank Dr. Snelling for bringing this subject to the meeting. It is very interesting. He said in his preface that we read about it and hear about it constantly, but it doesn't do us

any harm at all to have it discussed because while it is popular and we all like it and use it, still I believe it must be used cautiously. We must remember that, after all, it is a general anesthetic and all general anesthetics have some degree of toxicity and some degree of danger. I am not speaking of the mechanical dangers of the use of spinal, such as traumatization of the spinal roots or accidents of that kind, because I take it for granted that those who use spinal have familiarized themselves with the technic and would not be foolhardy enough to try it unless they were sold perfectly themselves.

Dr. E. McL. Causey (Franklinton): The question of spinal anesthesia is apparently not settled although I believe at the present time we are riding a wave of enthusiasm for spinal anesthesia which perhaps has been precipitated by the very reliable blood pressure raising qualities of ephedrin and perhaps by the recent work of Pitkin with the light solution.

I believe in endorsement of what Dr. Cassegrain has to say that spinocain has some very definite advantages in enabling one to limit the level of spinal anesthesia. Although I believe the finest with spinocain can be a little better, the factors of safety can be obtained with crystal novocain when properly handled in proper dosages and proper technic.

The conclusions of Labat as regards the use of ephedrin sulphate are of course very interesting. I have no doubt that his primary conclusions are drawn from the very well known fact that any vasoconstrictor will certainly decrease the cardiac output. It is well known that ephedrin sulphate will decrease the cardiac output, and for this reason it has been considered to be contraindicated in these conditions.

Granting that it decreases the cardiac output, there can be no question that it does raise the blood pressure, and therefore I think there can be little question that it decreases the degree of cerebral anemia.

In Dr. Snelling's cases in which he used no ephedrin, it is interesting to note that thirty-six out of the fifty cases showed a great deal of nausea. I believe a suggestion here, in place of simply having the patients take a deep breath, would be to sponge the face with cold water and reassure them. I believe it is well known that these patients have nausea and vomiting because of an anoxemia which to some degree a deep breath will help.

I believe for all types of so-called high spinal anesthesia in which spinal anesthesia is induced up to the costal margin, where the accessory muscles of respiration are somewhat paralyzed in their motor function, all these patients should be given routinely inhalations of oxygen. I be-

lieve you will find that the patient nauseated with spinal anesthesia will have the nausea relieved quickly with inhalation of oxygen because of the resulting anoxemia.

I want to say a word here about the immediate use of the Trendelenburg position, and by immediately I mean within the first few minutes of injection. As one of the discussors of the paper has already said, the novocain dissolved in spinal fluid is heavier than the spinal fluid. For that reason the immediate Trendelenburg position following the injection of novocain crystals into the spinal fluid may result in the going down of the solution to the upper portion of the dural sac to the medulla and to the brain itself almost immediately. I believe that even Labat, who recommends the Trendelenburg position, recognized the fact that a few minutes, probably three, four or five should be allowed for a fixation of the novocain solution into the roots of the spinal cord. In this way, then, the solution can in no way go down and paralyze the tract so high.

I believe it should be said, too, that respiratory failure is a very real thing and is probably not dependent upon a medulla infiltration of novocain as has been considered, but a progressive block of those roots which go up all the way to the medulla. A blocking of the spinal roots to the level of the fourth cervical will not only block all the accessory muscles of respiration but cause phrenic enervation and result in diaphragmatic paralysis which will give respiratory failure.

Dr. E. A. Bertucci (New Orleans): I want to speak from the standpoint of the general anesthesiologist having given over a few thousand gas-ethylene-oxygen anesthetics.

While I want to commend Dr. Snelling on his paper, I think we are beginning to get too enthusiastic over spinal anesthesia. We will all admit that there is a greater amount of danger in spinal anesthesia than there is in ethylene-oxygen anesthesia. I don't think and don't believe there is any real contra-indication in general anesthesia given with ethylene-oxygen, while there is probably some permanent injury that may result from, as I hear, bulbar paralysis from spinal anesthesia. I believe the patient will be safer, no matter how short the operation may be, when given a whiff of ethylene.

During our recent investigations with amytal sodium intravenously, the patient becomes thoroughly relaxed as he goes on the table and will take a better ethylene-oxygen anesthesia.

While I admit there may be very few advantages in spinal anesthesia, I don't believe we should become too enthusiastic over the subject.

Insofar as Dr. Cassegrain's statement saying that the blood pressure is hardly taken in some cases before resorting to spinal anesthesia, I will

say there is a greater amount of danger when a patient goes on the table with a ninety-six or 100 systolic blood pressure. If the blood pressure is not taken and a spinal anesthetic is given, which will reduce that blood pressure still lower, then we are going to have some serious trouble. Therefore, I believe the ethylene-gas-oxygen anesthesia is the best and safest in any operation.

Dr. Carroll W. Allen (New Orleans): The doctor has invited me up here. What I have to say is along little different lines than have been discussed, as I fear sometimes we forget the origin of the methods we use, particularly the history of the spinal anesthesia both in America and in New Orleans.

Spinal anesthesia had its inception with the experiments of Corning in New York in the early nineties. Corning, in those days, was a general practitioner with a tendency to develop a specialty in surgery, particularly genito-urinary surgery. Cocain had but recently been introduced, having been brought to us by Kohler in 1886, and its application had been extended to various fields. Kohler was an ophthalmologist.

Corning tried its use in the spinal canal first experimenting with dogs. He had an idea and, by the way, so many of our original thoughts as to how things happened were wrong as has already been brought out. There are some errors in our analysis of the clinical happenings. Corning thought by injecting the cocain near the spinal canal the circulation would carry it to the cord. He found, however, that a very exact technic in between the vertebral bodies was necessary. He, without his knowledge, must certainly have gotten into the dural sac or anesthesia wouldn't have occurred. He succeeded in anesthetizing dogs to the satisfaction of himself and his friends.

He tried it on his patients with success and in about '94 in the New York Medical Surgical Journal (now discontinued) he wrote two very interesting articles which created a great deal of interest of a more or less academic nature. As is so often with such things, it did not attract the serious attention of the clinicians of this country. It went abroad where Bier, since of Berlin, Tuffier, Quincke, and others took it up. In a few years it came back to America with a foreign veneer as the Bier spinal anesthesia. Everybody got hold of it and we had a good many disasters.

I was an intern in the Charity Hospital in '98 and '99 and was present with Dr. Matas when I believe he did the first recorded spinal anesthesia, and later followed it in his clinic by himself and staff. Almost coincidental with that Dr. Chassaignac and Dr. Delaup, after careful study and consideration of it, used it routinely in their clinic. I believe its popularization originated here. I think Morton of Los Angeles and Cocks up in

Buffalo each had a few cases ahead of us, but they were not published. It became very popular and we used it for all sorts of things. After a time the majority of the surgeons discontinued it. Statistics began to come in showing a mortality of anywhere from 1 to 500 to 700 cases. It was persisted in by Dr. Chassaignac and others who studied and developed its technic further.

Some fifteen years ago Jonnesco began its use and another wave of popularity swept the country. That has happened several times since. There have been few men who have been as consistent in developing the use of spinal as Dr. Chassaignac and those associated with him and who followed him in his clinic. I believe the total of spinal anesthesia in New Orleans is probably greater than that used anywhere else.

About the newer things. The only new things that have come out have been the newer discoveries. As far as controllable spinal anesthesia goes, that was worked out by Barker of London about the time we began its use here, and anyone interested in controllable anesthesia would find the reading of Barker's articles most interesting and instructive.

I do not believe that a careful study of the statistics will show that the mortality has been materially reduced. I believe they must run close to 500 or 600, pretty much as they did in those days. Our aseptic technic has been improved, but otherwise the difficulties we have are largely the same. We have been discussing so much that I won't burden you with any more. I wanted to mention a few historical things and say something about what our men here in New Orleans had done to popularize its use.

Dr. Charles Chassaignac (New Orleans): The paper just read really referred to the effects of this method on blood pressure and the indications or contra-indications for the use of ephe-drin, but it gradually expanded into almost a general discussion on spinal anesthesia. So I will not be sinning more than some of the others if I get a little into the general question.

The only way I can be of any use is due to the fact, as has been stated by some of the speakers, that I was one of the original users of the method and commenced using it rather extensively as far back as thirty years ago, and continued the use of it, together with my assistants, Dr. Delaup, Dr. Gelpi, and Dr. Kahle, up to about ten years ago and the others have continued since. So we have accumulated between us a very large number—I don't know how many thousands, but a good many thousands—of cases.

That period has been long enough for me to see spinal analgesia gain in popularity, wane in during the entire thirty years. popularity, rise in popularity again, and so on

Perhaps I can throw some light, indirectly it is true, upon all the discussion by quoting a few conclusions in my second paper because it refers also to the first paper published in 1904. At the time of this second paper I published the result of four additional years of the use of spinal analgesia, with the addition of 650 cases, which made a total at that time of about 800.

The youngest patient operated upon was eighteen years old. The oldest was eighty-one years of age, operated upon for hemorrhoids over five years before the time of publication, still hale and hearty as well as active. One was in his seventies who had analgesia made four different times within the five years preceding the paper, for different operations on the prostate and bladder. It has been done in very anemic patients, in the tuberculous, in some with cardiac, and renal disease, in many in which general anesthesia would not have been attempted. In fact, that was one of the points made in those days particularly, that we could fall back on spinal analgesia when we would hesitate and probably refuse to use general anesthesia.

So, instead of being on selected good cases it was more, you might say, on selected bad cases that its chief use lay.

With over four years more of observation, then, since the publication of the first paper I was able to arrive at the same conclusions as in 1904 when the second paper was published in 1909. I will quote from the paper already referred to the conclusions reached four years subsequent to the first paper, which are the same and simply quoted from the first paper without any change.

"My humble opinion is that spinal analgesia will not displace any other method; neither will it die. It fills its proper place in our needs. It has its indications and contraindications like local infiltration and general anesthesia have theirs."

Gentlemen, from what I have heard today and many things I have read at intervals since that time, and the experiences I have heard related, I don't believe we can reach any other conclusion honestly. It doesn't take the place of anything else, but it has its own place and it is a question of judgment and the knowledge of the operator with this particular method whether he should use it or not.

Unfortunately, that many years back we didn't pay as much attention to blood pressure as we do today. We didn't have any apparatus to take the blood pressure. We relied simply on the pulse and we didn't have any ephedrin either, so I can't add anything to the discussion on those parts of the subject.

I will close by relating a little incident which enables me to bring out one point which is some-

times overlooked, although I was glad some of the speakers used the right term. I don't mean to criticize the writer of the original paper because I have only congratulations for him for having brought up the subject so intelligently and nicely, but the term spinal anesthesia is not correct. It is spinal analgesia. We don't produce anesthesia with spinal, nor do we with any of the local so-called anesthetics. Today the term is so generally used we can't object to it and custom makes it all right.

It is a joke on myself which will illustrate the point very nicely. In the early days of the use of this method I was demonstrating it before my class at the Charity Hospital, and we made a spinal on a young, healthy darkey for an operation on the urethra and bladder. After making the injection, waiting a moment for its effect to come on, I wanted to demonstrate to the class what the status was, and although I had explained very carefully to them the distinction between anesthesia and analgesia in a moment of absent-mindedness, or very foolishly at any rate, I took a needle and stuck him high up on the thigh and asked him, "Do you feel that?"

The darkey, who was no fool, instantly replied, "Yassah, Ah feels it, but it don't hurt."

You could write a volume but you couldn't express the distinction better. It doesn't produce anesthesia. In other words, it doesn't abolish the sensation of touch but it does abolish pain.

I mention that not in order to stickle about a definition but because it has its practical value. It is very useful because we have nervous patients to handle frequently and we want to make the patient understand that distinction. Otherwise, as you begin to operate the patient feels you are touching him, that there is sensation, and he or she gets alarmed and says, "I feel that." So you must make them understand early in the performance that feeling isn't abolished, that they still have the sensation of touch but the sensation of pain is abolished. Then they know what to expect and are much more docile during the operation.

Dr. J. G. Snelling (closing): If all who were present when I read this paper will recall my introductory remarks, you will remember that I said my purpose in bringing up this much discussed subject was for a discussion, and it seems I have produced that.

I have jotted down here just a few points to answer in the discussion. I don't intend to go into every point brought up. In the first place, there are so many angles in spinal analgesia that a man could hardly cover it unless he wrote a volume on the subject, and it certainly would not be fitting to be read at a medical meeting.

The question of the choice of anesthetics, the

question of the length of procedure as the determining factor in your choice of anesthetics, the age of the patient, and so forth, are without number.

Dr. Chassaignac mentioned that eighteen years of age was his youngest patient. In my paper I relate having operated on several children five and six years of age. In the current literature there is a report of a man who operated on a baby two weeks old, and on another case several months old, so that it is quite possible to operate on a very young person under spinal analgesia with the proper amount and the proper technic.

I don't mean to give the impression by that, that I think spinal analgesia is a panacea for all anesthetic or analgesic ills. I think it is a question of surgical judgment and not that we are going to make spinal an absolute routine to cover everything.

As I make this point and look out into the audience I see and have just listened to Dr. Carroll Allen whom we consider the father of local analgesia in New Orleans and this vicinity, and we all know there are a number of cases even of abdominal operations that can best be handled with regional anesthesia, and so on down the line.

In answer to the point brought out about the question of cerebral anemia, I think I stressed the fact that the symptom we are going to guard against, or rather the pathology we are guarding against is cerebral anemia and not drop in blood pressure. In other words, I think our entire armamentarium at our disposal in dealing with or protecting against the fatalities in spinal anesthesia is to prevent a bulbar paralysis, which has been rather definitely shown to be the cause of death in spinal analgesia.

The question of the diffusion of the spinal analgesic agent to such a height in the spinal canal that it would paralyze a sufficient number of fibers of the sympathetic system to produce paralysis of the diaphragm and thereby respiratory failure has, I think, been pretty well refuted by Koster who has had or has obtained analgesia, accidentally at first and then purposely, to such an extent that he was able to do operative procedures on the scalp. It seems in looking at these cases that while we had heretofore thought such a high anesthesia would give us a paralysis, it is not so in actual fact, the explanation of that probably being that there is more than one control of the respiratory center and that contributions to the phrenic are evidently not affected as they apparently would be.

The question in my paper that was uppermost in my mind was the fact that in spite of the slight increase in discomfort to the patient due to his nausea and vomiting, and in spite of the additional drop in blood pressure, which I showed in a small

series of cases to be fifteen to twenty millimeters increased, with the non-use of a stimulant; my conclusions are based not entirely on this small series of cases, but on other cases I have observed; the symptoms I just mentioned are present, and while the drop is greater, the post-operative condition and the post-operative sequelae are no greater. This can be verified, I think, by a number of men, such as Labat and others who are using that technic. If we can make the patient comfortable and overcome the discomfort of nausea and vomiting by the Trendelenburg position and deep inhalations or administration of oxygen, then we can eliminate an unnecessary factor, the factor of stimulation.

This isn't a hobby of mine, and I went into the thing simply after reading Dr. Labat's article to see whether I agreed with him or not. Of course, I don't propose to set myself up in comparison with Dr. Labat or anybody else, but having read articles in the literature on previous, various and sundry occasions, and having gotten sometimes different results I thought I would try the thing out. And my impression today is that it is not necessary to use a stimulant, and I wouldn't say it was contraindicated to use one, but for this fact that in ephedrin or adrenalin, or any similar drug, we not only get a vasoconstricting effect on the sympathetic fibers supplying the smooth muscles but we also have a direct effect on the heart muscle, its oppressor effect, and it has been shown, whether true or not I don't know because I am not a physiologist, that a damaged heart muscle is not benefited by a distinct oppressor effect. My idea was simply to get at the thing and see if we could get along just as well without a stimulant. In the occasional case that we run into where from clinical examination and all the means at our disposal we don't realize the condition of the cardiac muscle, in that case we might get some deleterious effect from stimulation. So if we routinely discarded our stimulant pre-spinal we would be getting away from any possible deleterious effect to a possible unrecognized cardiac condition.

One of the speakers in discussing the paper referred to the nausea and vomiting. In my experience nausea and vomiting have been easily controlled with the measures I spoke of and has not been a serious complication, certainly not a complication that we would put in the realm of cerebral anemia or something of that type.

One of the men discussing the paper, Dr. Cassegrain I think, referred to the toxicity of agents used. Dr. Allen and Dr. Chassaignac, and a number of others who are here of course, recall the first drugs used, cocain, tropacocain, stovain, and I think it has been pretty well demonstrated that the present product of novocain, or spinocain, which is simply novocain combined with other

ingredients, are less toxic than the former products that were used in spinal analgesia.

As to the mortality in spinal analgesia, the latest review on the subject I have been able to see shows a corrected mortality of about three cases in 11,000 patients. That was a series of cases compiled by a man in Boston in the recent literature, whose name I can't recall.

Gentlemen, I don't see any need for going further into rebuttal, or what not. As I said, my sole purpose was to bring this matter up for discussion and I feel we have had a very thorough and a very generous discussion of the subject.

DISAPPOINTMENTS IN CANCER SURGERY.*

ISIDORE COHN, M. D.†
NEW ORLEANS.

When one undertakes to review records there are certain outstanding disappointments which are experienced. The source of these disappointments are:

- (1) Reliance on methods
- (2) Dependence on laboratory data
- (3) Incomplete knowledge of the extent of the existing disease which results in unwarranted favorable prognosis in certain cases.

Methods which seemed so essential at one time are obsolete now. Procedures to which we attributed so much of the comfort of the patient have been found, in the light of subsequent experience, not to have been responsible for the effect obtained. Even though such methods have been discarded as unnecessary they have served their purpose.

Realization of this truth is of value as change represents a developmental stage in surgical technic. In surgery resourcefulness counts more than knowledge and skillful application of a particular method.

Many disappointments result from placing too great reliance on laboratory data. This is evidenced by the disappointments which one experiences with various examinations of the blood, rush sections at the

operating table and other technical aids too numerous to mention. Operative procedures and laboratory tests are part of the evolution of medicine. Hence, too much reliance on methods brings disappointment.

Physical phenomena and clinical symptoms are sources of disappointments because they too are but the interpretation by the mind of hidden pathology.

Some deaths which have occurred seem, in the light of developments, to have been avoidable, if we had only known. This is probably the greatest stimulus to learn more and to do better. The day has not arrived when avoidable deaths do not occur.

Such thoughts crowd the mind when we think of our own experiences with surgery of cancer. Cancer surgery at times provide both surprises and disappointments. Witness the statements of Stanley Reimann: "The histories of 3780 carcinoma cases were investigated to discover whether patients are applying earlier for treatment. The difference in the delays from 1900 to 1927 is small. More education is needed." After a prolonged campaign it is disappointing to find that intelligent people still present themselves for the first time when the disease has progressed beyond the confines of the original organ involved. This applies, unfortunately, particularly to cases of carcinoma of the breast, stomach and sarcoma of bone.

In recent years a number of such cases have come under my observation, and a review of their records has prompted this presentation.

The cases to be discussed include:

(1) Carcinoma of the breast in a male who was seen for the first time when the patient already had extensive metastases to the lung.

(2) Carcinoma of the uterus with eventual metastases, both pulmonary and skeletal.

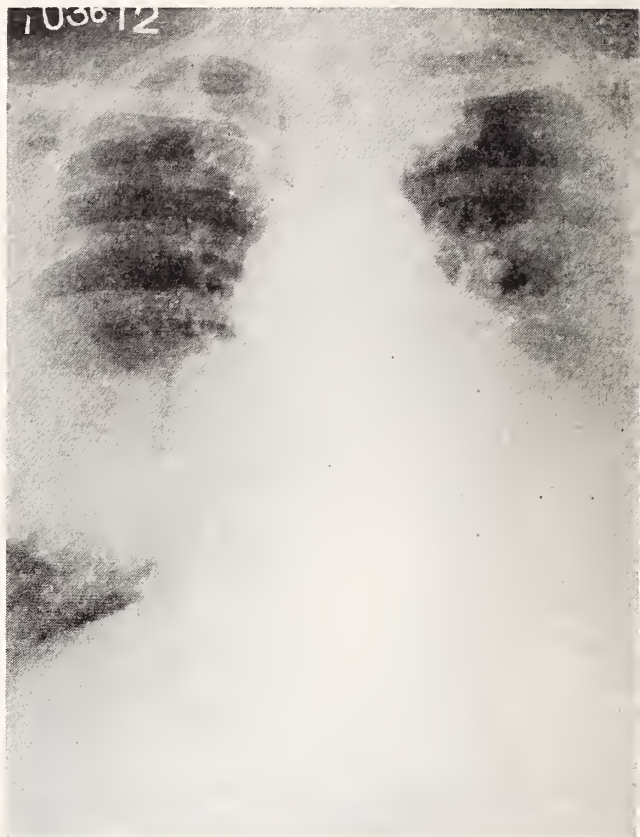
(3) Carcinoma of the lung either primary or secondary with extensive metastases to heart, liver, peripheral nerves, dura and skeletal metastases.

*Read before the Orleans Parish Medical Society, November 9, 1931.

†From the Department of Surgery, Tulane University, School of Medicine and Touro Infirmary, New Orleans.

A brief summary of each case will be presented and clinical observations recorded. An attempt will be made to interpret some of these clinical observations.

The first case, Mr. L., aged 54 years, presented himself with a carcinoma of the breast. This case alone might adequately express all of the disappointments that can come to surgeons, and the profession in general, when we think of the efforts which have been made to educate the public to the importance of applying early for relief when there is known to exist a growth in the breast. This patient was conscious of the existence of the growth for several months, he had lost weight, he had an irritating cough which was not, however, associated with a profuse expectoration, and the sputum was not blood tinged. Physical examination revealed a large tumor of the right breast. Examination of the chest indicated metastases to both lungs. Roentgen ray



Mr. S. L.—Carcinoma of Breast. Picture taken at time patient came under observation.

examination revealed an infiltrating type of lesion in both lungs.

Here, therefore we were confronted with a patient on whom a radical operation could not possibly offer the least hope. Mammectomy, for the purpose of removing the large mass which would soon have broken down, was proceeded with otherwise a large foul ulcerating mass would have made the patient's life miserable. It was with a view of avoiding such a sad situation that mammectomy was done.

This case is of more than ordinary interest because of the appearance of a carcinoma of the breast in a male, and the extensive pulmonary metastases found at the initial examination. The incidence of carcinoma of the breast in the male is given by most authorities as less than 2 per cent. One would think that an intelligent man would not wait until a tumor on his chest wall had attained the size of a grape-fruit before applying for treatment.

The temptation to consider only the cancer of the breast and immediately to pro-



Mr. S. L.—Metastatic carcinoma of lung, primary growth. Carcinoma of Breast.

ceed with a so-called radical operation is great, and I believe that in some instances such patients have extensive operations done without the surgeon knowing that the disease has progressed far beyond the confines, not only of the breast but the removable lymphatic involvement.

In the beginning of the paper a statement was made that one of the sources of disappointments which we experience is incomplete knowledge of the extent of the existing disease. It seems almost unnecessary to state that no radical operation for carcinoma of the breast should be done unless a roentgenogram of the chest has been made. It is true that some carcinomas of the breast never metastasize to the lungs and that skeletal metastases are the only ones which are found.

Frances Carter Wood in discussing a paper by Dr. Rose on roentgen ray treatment of bone metastases, stated: "It is rather interesting to note that patients who get bone metastases rarely get pulmonary lesions; the ones who get pulmonary lesions die early."

This statement was not made with particular reference to breast cancers, but it is a common observation that it holds true in many cases of breast carcinomata.

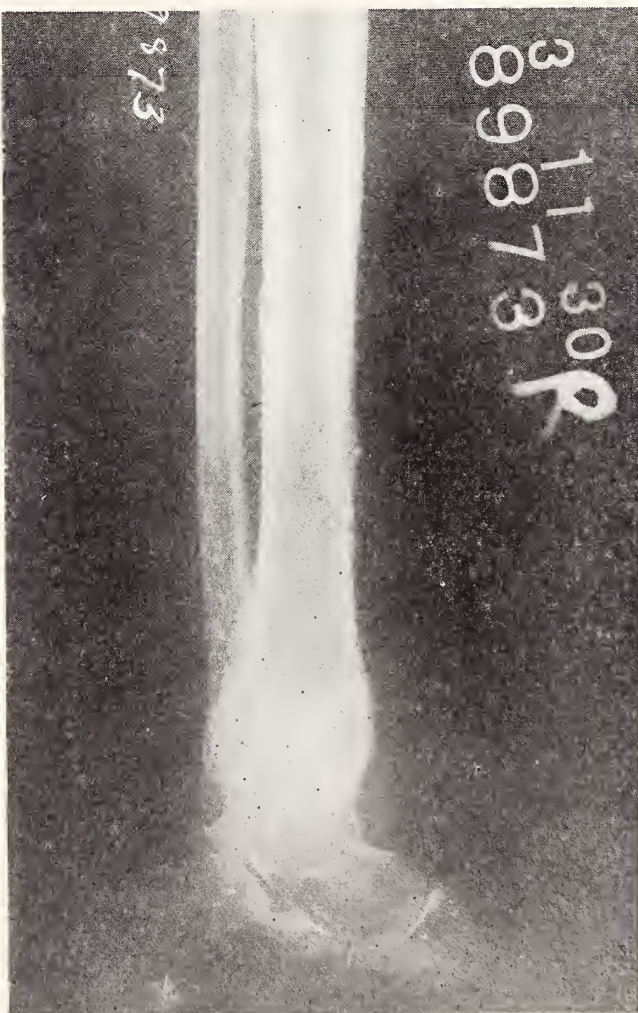
Pulmonary metastases in carcinoma of the breast occur more frequently than is generally recorded. I do not believe that statistics on this particular subject are at the present time available, and if they are available I do not believe that they are accurate because it is not a general routine practice to make pre-operative radiograms of the chest in carcinoma of the breast. It should become as essentially a part of an individual's practice as a leukocyte count before an abdominal operation in an acute surgical abdominal emergency. My own experience with pulmonary metastasis is not extensive yet sufficient evidence will be presented to indicate that it is not rare.

In the group of cases which I have observed, and which are here presented, we have evidence of the variable roentgen ray appearance of metastatic carcinomata of

the lungs, as well as the lack of a constant clinical syndrome to guide in diagnosis.

Failure to diagnose and treat the carcinoma before this unfortunate late manifestation appears provides a great disappointment in some of these cases. In order to emphasize this statement we need first but to refer to the case which has already been presented. Imagine the disappointment of the family of the patient when told that the disease had progressed so far, yet the only symptom which this patient had, which was referable to his pulmonary involvement, was an irritating cough.

One of the most startling experiences that I have ever had, in a patient who had an extensive involvement of both lungs, was Mrs. M. who presented herself because of pain in her leg which followed a fall. This patient had been treated by a leading



Mrs. M.—Metastatic carcinoma of tibia and fibula, pathological fracture.

gynecologist for a carcinoma of the uterus. There was no evidence locally to indicate that the uterine carcinoma was not cured. This patient had no cough and was not conscious of any pulmonary involvement. Roentgenogram of her leg (illustrations) showed a pathological fracture with an extensive carcinoma of the tibia. A picture was taken of her chest (illustration) and this showed extensive diffuse carcinomatous deposits throughout both lungs.

In another patient, whose case has been recorded in a paper on "Epithelial Neoplasm of Peripheral and Cranial Nerves" the patient had been treated for pulmonary tuberculosis because of a cough, profuse expectoration and repeated hemorrhages. During life we suspected carcinoma of the lung. At autopsy an extensive carcinomatous involvement of the lungs and other organs was found. (Illustrations Mr. G).

The value of careful complete examinations is illustrated in the following case of a patient with a primary carcinoma of the lung.



Mr. J. J. G.—Metastatic carcinoma of lung. Primary growth muscular spiral nerve. 3-5-27.

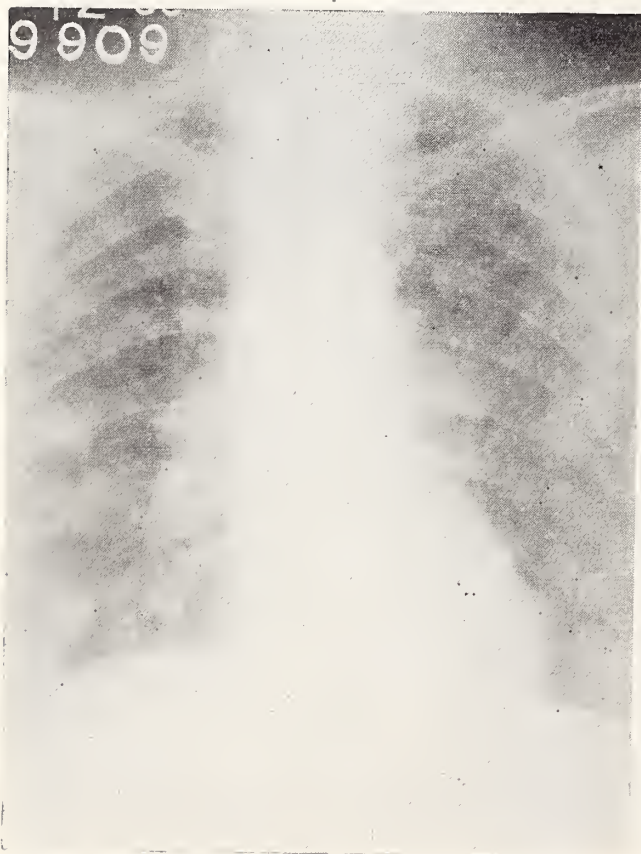
This patient presented himself with a small tumor in the region of the insertion of the deltoid. Besides this tumor the patient gave a history of a productive cough of about four months duration. A careful study of this patient was made by Dr. Conrad Collins, then a Junior Intern at Touro Infirmary. It was his impression that the patient had a carcinoma of the lungs, that the superficial tumor was a metastatic growth. All examinations verified his impression. One cannot help but digress for a moment to compliment such a splendid piece of work as evidence of the highest type of efficiency and interest in the work assigned.

The summary which is here presented is abstracted from the examination made by Dr. Conrad Collins.

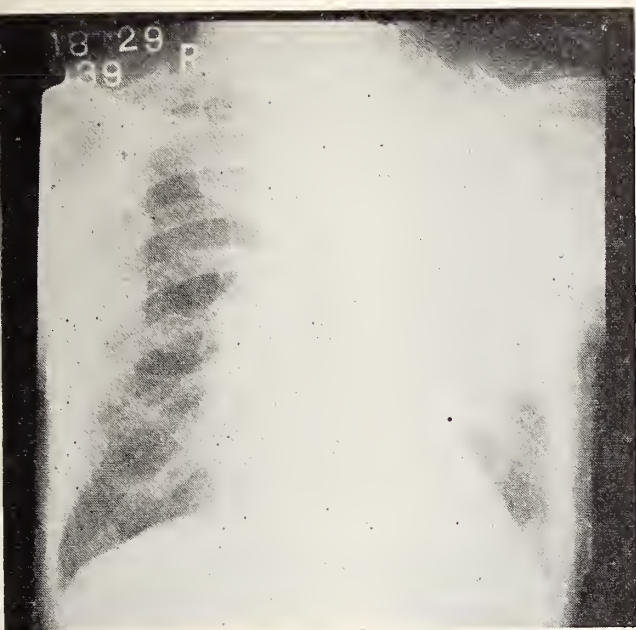
Mr. K., aged 65 years. Patient has had a productive cough for the past four months. The expectoration is mucopurulent in character. He has never had hemoptysis. There is no history of dyspnea nor thoracic pain.

Physical examination reveals marked emaciation. Expansion of the chest is limited and there is marked lagging on the left side. There is impaired resonance throughout the chest except at the left apex where the percussion note is flat. Some dulness on percussion in the left axilla. The voice and breath sounds are normal over the entire chest except at the apex where they are decreased.

Dr. Collins stated that it was his impression



Mrs. M.—Metastatic carcinoma of lung. No symptoms.



Mr. O. K.—Carcinoma of lung. Carcinoma of peripheral nerve.

that this was a primary carcinoma of the lung with metastases to the left arm and forearm.

An abstract of the roentgen ray findings follows: "The changes are characteristic of a neoplasm. It is believed that the original tumor is most likely an endothelioma of the pleura." (Henderson).

At autopsy the left lung was covered with strong adhesions, the greater portion of the lung, except the lower portion, was tumor mass. The tumor occupied the entire upper lobe, and there were a number of small metastatic nodules away from the main mass.

Metastatic or primary carcinoma of the lung may exist without producing outspoken symptoms. Cough may, or may not, be present. When cough is present cases are at times treated for tuberculosis and other more commonly recognized conditions. The sputum is usually mucopurulent, not blood stained. This statement is not only the result of personal observation, but based on recent studies by Parish and Rist and Rolland. The last named investigators state that it did not resemble currant jelly in any case observed by them. Hemoptysis is not common as an early manifestation, according to Parish. There may not be pleural effusions at any stage of the disease. Parish states that at first the effusions are

non-hemorrhagic. Of great importance is their observation that microscopic findings in pleural effusions are not constant.

Metastases to both lungs may be extensive and yet physical examinations have been known to fail to aid the examiner in arriving at a diagnosis. It is both comforting, and at the same time disconcerting to realize that such statements as the following are true. "Physical examination is often fruitless, while roentgen examination is not absolutely reliable." (Scholz.)

The physical signs, "particularly of the hilar, juxta-hilar, nodular, and parenchymatous lesions are most often mute to percussion and auscultation, and in four or five hilar cases no physical signs were elicited." (Rist and Rolland.) I quote this particularly because on one occasion (case Mrs. M.) when I could not elicit physical evidence of the metastatic growth, one of my younger colleagues intimated that "my inability to find it was probably a personal equation, and that an internist would certainly have been able to have found the evidence."

The roentgen ray is the most satisfactory method of diagnosis in general use. A study of radiologic appearance of carcinoma of the lungs has recently been made by Rist and Rolland. While this study was made of primary carcinomata, the statements hold equally true for metastatic carcinomata, and the outstanding fact is that the radiologic evidence of carcinoma of the lung presents many different appearances.

The roentgen ray phases which he discusses are: (1) A condensation area at the level of the bronchovascular shadow. (2) A pseudocystic appearance that is opaque, homogeneous, and more or less circular lying out in the pulmonary parenchyma. (3) Another common appearance is complete opacity of a hemithorax, at times leaving the extreme apex and the costophrenic sinus clear. (4) There may be the aspect of ordinary pleurisy and diagnosis may not be made until after pneumothorax.

Very little has been said about methods of treating cancer. It may be assumed that no man is today certain that one method is going to be of value in ten years. Stanley Reimann has recently summarized the situation very well. He states: "The interminable discussions at nearly every meeting at which cancer is mentioned, as to whether one procedure or another is sufficient to 'cure' a carcinoma, are often exasperating enough to warrant the question: 'Have you no experience with cancer?'"

We need to realize more of the character of the cell in order to know how to rid the patient of the particular tumor. If we want to improve our results it will be necessary to (1) accept new method, (2) to become independently dependent on laboratory data, and (3), above all, we need to more exactly diagnose our cases early.

DISCUSSION.

Dr. E. D. Martin (New Orleans): I want to compliment the doctor on bringing the subject before us, but I think there are few surgeons who have not had a similar experience. A few days ago I picked up a paper on cancer of the breast that I had written in 1903, and if I were to read it here tonight it would be just as applicable to the subject as it was then. It shows how little improvement has been made in cancer therapy. I do not believe we are going to make any until we discover the etiology of cancer—until we discover the cell which is so much like the tissue in which it originates that there is no way of isolating it. I believe the discovery will eventually be made through the blood stream and possibly through the blood stream will a cure be possible. We will never recognize, or never have recognized the cell until it had begun to manifest itself. And too often when it has manifested itself it is too late to do anything.

Unfortunately most of these cases reach us when it is impossible to give relief. Radium helps us but only when we have made the diagnosis clinically. Not until objective symptoms appear can we get confirmation from the radiologist nor is this dependable. Superficial carcinomas of the skin or breast we can reach in many instances in time. We get them when they are nodules and if eradicated then, well and good; but when they have gone on to a certain point we are helpless. Many cases of carcinoma of the breast come to the hospitals in almost the last

stages. It is seldom we get one before metastasis occurs.

My experience is, that whenever we find carcinoma of the breast, usually we are confused, especially if the inner quadrant is involved. If we do not have apparent metastasis at that time it appears very soon after. I have seen metastases within a very few months after operation appear in the sacrum, sternum, brain, liver—in fact, in almost every organ in the body. We may be real sure that whenever we do have a case of that kind operation is futile—palliative treatment is all that should be considered.

The only time we operate in these advanced cases of the breast today is when we have a sloughing mass and we simply excise to get rid of the stinking odor in the ward. Halstead has done great good because he taught us to operate early, but he did a major operation in all cases; this I do not believe gives better results. Whenever it is necessary to do the Halstead operation it is often too late.

What is our experience today? Take even carcinoma of the stomach. I had a case not long ago in which there was apparently no involvement of the bowels,—the picture showed practically no trouble,—yet when that abdomen was opened the entire posterior and lesser curvature was involved and nothing could be done.

Of course, if we can recognize these conditions in their very incipency, as I have been fortunate enough in a great many cases to do, then we may be hopeful.

As a result of propaganda spread throughout the country, a great many cases of breast cancer are coming in to us early but we do not get them at Charity Hospital. On a case operated lately, there was apparently small involvement of the axilla and subclavicular glands but when the tumor was removed we found glands further on were involved. I have not seen one of these cases that lived longer than a few months. There are cases operated on for tumor of the breast,—cases in which the neoplasm was not recognizable at the time of the operation, nor was it recognized until biopsy was done.

It is a question generally of early diagnosis. How are we going to do it? The laboratory has helped confirm the clinical diagnosis. I ask how many have been diagnosed in the laboratory?

Dr. King: My remarks will be applied more especially to growths of the breast.

I believe the consensus of opinion now is that every tumor of the female breast is a potential malignancy, therefore, it is advisable to remove this growth even in young women as soon as it is discovered. This has been my practice for a good many years. We never know when these growths are malignant or will become malignant.

I think that Handly, of England, has taught us more about the lymphatic system of the breast and the danger of metastasis than any other man. He has gone into this question very very thoroughly and in his operations he is very thorough and makes an extensive dissection, almost down to the umbilicus. His conclusions have been borne out, that is, his claim of metastasis have been borne out by autopsy.

I have had in our service in the last ten or fifteen years only two opportunities to follow the cases to the dead house. One case was operated on and followed to the dead house and upon autopsy no metastasis was found. But another old woman came in to the hospital too late for operation; she was almost dead when she arrived and died a day or two after she was admitted. I was curious to know the extent of metastasis in this case, so I followed the body to the dead house and was witness to the autopsy. There was involvement of the lymphatic glands, of the axilla, mediastinal glands, stomach, and liver. When I saw these things it was hard to believe them.

Doctor Martin has remarked on the inadvisability of operating on some of these cases except merely to remove a stinking mass. I have had a good many of these cases on our service, apparently inoperable cases, and when they have progressed this far, we simply send them back. As a matter of curiosity, we removed some of these tumors that it seems ridiculous to operate on, and it has been surprising how long they lived afterwards.

We know that there is metastasis in the mediastinal glands, and I apologize to Doctor Cohn for not having had roentgen ray films made on all of these chests, but they lived along for six months or a year, and it is better to live along with an improved condition of the breast than the condition in which these cases came to the hospital. As a matter of fact, we have been very well pleased with the temporary results in some of these apparently inoperable cases.

Another thing that is marvellous to me is how many of these tumors come in, in country people, diagnosed as abscesses. We have had cases brought in with a cancer as hard as a cocoonut, with an incision 1 or 2 inches where someone hoped to find pus and did not, then, realizing his mistake, after months, sent the patient in to us. Naturally by then it is almost a hopeless case.

Dr. Cohn (closing): Doctor King has said that many of these cases that come to autopsy show no evidence of metastasis. I believe this is largely due to the fact that the autopsy is not always complete. In one of our cases of carcinoma of the lung we found metastasis in the liver, heart, spleen, suprarenal glands and also in the dura. I do not believe it is any more fair to say that we

know about the percentage of metastases in the lungs than it is fair to say that those on whom an incomplete autopsy is done show no evidence of metastasis.

I should like to repeat that we ought to be ashamed of ourselves for not routinely making roentgen studies of the chest before proceeding with radical breast amputations. We are not talking about cases of ten years ago; we are talking about now; and I believe a good many cases are operated on in which the roentgenogram, if made before operation, would show evidence of metastases. Unless we have these films made, we cannot eliminate that particular source of error which ought to be eliminated.

HEADACHES OF OCULAR ORIGIN.*

CHAS. A. BAHN, M. D.

NEW ORLEANS.

This subject should interest all physicians because the visual mechanism is at least partially responsible for approximately 75 per cent of all chronic bilateral frontal headaches, and 40 per cent of all chronic headaches. Approximately 60 per cent of patients who consult an ophthalmologist for the relief of headache have an extra-ocular causative factor of sufficient importance to affect recovery. Reilly states that 50 per cent of headaches are toxic, 40 per cent are reflex and 10 per cent are mechanical. In ophthalmic practice the ratios are somewhat different, 60 per cent being reflex, 25 per cent toxic, and 15 per cent mechanical. Many of the headaches which we are called upon to cure have multiple causative factors. Leftwich mentions 130 causes of headaches.

The pathology of headaches is not entirely understood. No theory explains all cases. Pressure however is a dominant factor. The brain substance, though practically insensitive to pain, has covering membranes and blood vessels which are exquisitely sensitive to pressure. Even in reflex and toxic headaches coincident vasodilatation is thought by some sufficient to alter intracranial tension, thus intensifying any existing chemical irritation in any part of the fifth nerve which has been called the

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headache nerve. Either an increase or decrease of intracranial tension causes a relative stretching of the sensory terminals.

The sensory nerve supply of the anterior dura is the meningeal branch of the second division of the fifth nerve and the anterior and posterior ethmoidal branches from the first division. The dura of the middle and posterior fossa is supplied by the recurrent branch of the third division, and by the meningeal branch of the vagus.

The location of a headache unfortunately does not always afford accurate information concerning its cause. From a diagnostic standpoint pain sensation is often not projected correctly. Generally speaking, fatigue headaches of ocular origin are usually frontal or occipital. Mechanical headaches of ocular origin, as occur in glaucoma, usually begin in the orbit and radiate to the temple. Toxic headaches of ocular origin, as occur in uveitis, are usually supraorbital or may be referred to the entire side of the face. Head's interesting investigations show that reflex headaches from the chest and abdomen have a rather definite location. The lower the causative lesion in the body, the more posterior usually is the headache.

The most intense headaches may occur in brain tumors, meningeal inflammations, and in migraine. Intensity is of relatively little diagnostic importance because of the wide variations which occur in apparently similar conditions.

Headaches caused by brain tumors are often constant and nocturnal, which also is somewhat true of luetic forms. Reflex headaches associated with fatigue are usually relieved by rest and are worse in the afternoon or evening. Toxic headaches may be worse in the morning or evening depending on the maximum absorption.

The most frequent ocular cause of headaches is refractive errors, which act reflexly. Their frequency is explained by the involvement of both the third and fifth nerves in the accommodative process. They are usually bilateral, and either supraorbital or occipital. Being a fatigue reaction they are aggra-

vated by prolonged near or distant fixation and usually occur in the afternoon or evening, being relieved by sleep. Occasionally they recur on waking, the ocular fatigue from the previous day having been only partially relieved by sleep.

Astigmatism causes more severe and frequent headaches than the other refractive errors, hypermetropia, myopia and presbyopia. Greater fatigue results from the attempt to overcome cylindric than spheric errors, in fact, geneally speaking, $\frac{1}{4}$ diopter of astigmatism causes as great subjective symptoms as 1 diopter of spherical error.

We are frequently asked if cycloplegic drugs are necessary in the examination for glasses to relieve headache. In a series of approximately 100 patients of varying ages from 3 to 50 years who were carefully studied, it was found impossible in more than half to have prescribed efficient glasses without the cyclopegia.

Another question that is frequently asked is: Should glasses for the relief of headache be worn constantly? With the exception of presbyopic corrections, it is generally advisable that such glasses be worn constantly until the symptoms have subsided, when part time may be as effective.

Motor anomalies rank second among the ocular causes of headaches. The phorias, especially vertical, more frequently cause headaches than the tropias and paralyses, apparently due to the increased fatigue in maintaining binocular single vision. Properly prescribed vertical prisms are most effective, but are seldom of service. Ocular calisthenics have been recently popularized for the relief of headaches due to muscle imbalance. The eyes fix some object such as a pencil which is moved right, left, up or down 3-5 seconds. The eyes are closed a similar period and then the movement is repeated some 10-30 times. In about 50 cases which I treated with this method as an adjunct to other treatment, the permanent results did not justify its continuance.

Severe and frequently deep orbital head-

aches frequently follow excessive or other faulty light exposure. Persons with very light colored eyes and large pupils are usually more sensitive. There is frequently an associated physical and mental sensitiveness which retards recovery.

In middle life, glaucoma is a relatively frequent cause of headaches. They vary widely in severity, are usually unilateral and are often mistaken with the pain of trigeminal neuralgia. Beginning frequently after physical fatigue or mental shock, the pain is usually first in the temple and then spreads frontally. Inflammatory changes in the eye and adnexa may or may not be present. Blurred vision, haloes about lights, tortuosity of the conjunctival vessels, corneal dullness, increased hardness of the eyeball, shallowness of the anterior chamber, dilatation and imperfect reactions of the pupil, large and overhanging disc excavation, and especially nasal contraction of the visual field are among the associated symptoms. These are all present only in advanced disease, when usually but little can be done to save sight. Any of these symptoms should promptly send the patient to an ophthalmologist. For emergency treatment use 1 per cent pilocarpine muriate or 1/5 per cent eserine sulphate solution in the eye three times daily. Generally speaking, miotics and maintenance of the best possible general health is advisable if the intraocular tension can be kept normal and the vision and visual field stationary. Otherwise, operation is advisable, the sooner, the better is the prognosis.

Never use atropine in an eye with increased tension. I have a patient under treatment who is totally and permanently blind in both eyes apparently because her family physician did not recognize glaucoma as the cause of her headaches and used atropine in her eyes. This is mentioned to impress you with the tragic details of an unfortunate occurrence which we ophthalmologists see from time to time.

Uveal inflammation, especially iritis, frequently causes unilateral frontal headaches which are usually more severe at night. Ciliary injection, corneal precipitates, aque-

ous turbidity, iris swelling and adhesions, and normal tension differentiate it from primary glaucoma. Here atropine sulphate solution 1 per cent is the principal feature of local treatment which also includes heat light, temple blood letting, and analgesics such as nervocidine. Excluding the post-traumatic types, uveitis is an ocular reaction of an extra ocular toxic cause, which obviously should be removed when practical.

Acute inflammations of the lids, such as styes, chalazia and abscesses, frequently cause headaches, as do acute lacrimal and orbital affections. I am frequently asked the most approved treatment of styes: Removal of infected lashes, heat light application, Besredka vaccine used as a wet dressing 30 minutes three times daily, 5 per cent calomel ointment applied to the conjunctiva nightly, combined with the regulation of living habits, have proven most effective in my hands during the early stages. Later, incision may be necessary.

Associated with headaches in brain tumors is frequently vertigo, nausea, papilledema, and specific visual field changes. These usually begin with blind spot enlargement and later involve concentric shrinkage of the field, especially for colors. The pain in brain tumors is usually of a boring type and is referred to the interior of the skull. It is usually worse at night, not relieved by sleep and very severe, lasting often weeks without intermission. Tumors affecting the base are usually the most severe sensory symptoms.

The chronic bilateral suboccipital morning headache of interstitial and other forms of nephritis is frequently associated with optic neuro-retinitis, flame shaped retinal hemorrhages and other definite fundus changes.

Headaches in diabetes are usually a diffuse pain or sense of heaviness. The associated changes of refraction, characteristic uveal disease and retinal changes including multiple small hemorrhages are of diagnostic value.

In the ophthalmic form of migraine,

lightning-like sparkles appearing on a black background and associated with concentric or hemianopic field contraction precede the headache. The pain is usually of a boring character and begins over the brow extending to the temple. These attacks, although disconcerting, cause no permanent sight impairment. After about three hours the patient falls asleep and on awaking is apparently normal. Migraine resembles epilepsy in some respects and is believed by some to result from endocrine dysfunction. The attacks are apparently aggravated by uncorrected refractive errors and excessive ocular fatigue. The retinal vessels are dilated and tortuous during the attacks.

Tri-facial neuralgia is a face ache rather than a headache with frequent involvement of the eyeball and adnexa. Lacrimation and dilatation of the conjunctival vessels frequently accompany this symptom complex of middle life which is associated with arteriosclerosis.

Headache of various sorts is a frequent symptom in all stages of syphilis. The location of syphilitic headaches is so variable that no diagnostic importance exists. The most frequent associated ocular symptoms are uveal disease, extra- and intraocular paralyzes as well as inflammatory and degenerative changes in the retina and optic nerve.

The purpose of this contribution is to refresh your memories with the fundamentals of one of the most frequent symptoms we are called upon to relieve.

DISCUSSION

Dr. Allan Eustis: The question of headaches interests all of us whether we are surgeons, internists, ophthalmologists, or otolaryngologists, and the effort to determine the cause of headaches is one of the most interesting phases of medicine.

I was interested in listening to Dr. Bahn to see the difference in the results of statistical study in which he says that 70 per cent of the cases that he sees with headaches are of ocular origin. Leftwich states that 50 per cent are toxic in origin, and in a rough estimate this afternoon of cases I see with headaches, I found that 90 per cent were toxic in origin. It all depends upon the individual type of work the physician is doing. I know that I do not send probably more

than 5 per cent of cases that I see with headaches to the oculist as they probably already had a thorough oculist's examination.

I must say that the toxic feature of headaches is very pronounced in cases I see and this type of headache is classical. I record it in my notes as P. C. N. (post cervical neuralgia). In an analysis of 120 cases of chronic intestinal toxemia, some years ago before the Texas State Medical Society, 73 per cent of these patients complained of this post cervical neuralgia. No doubt a large percentage of cases also have errors of refraction and without the use of their glasses their headaches are very pronounced. On the other hand, the basis of a large number of headaches is toxic.

In seeking further, along with ocular symptoms one must not forget the relationship of the deep sinuses. Some of the most obstinate headaches have been found to be caused by chronic sinusitis. I had one case of a woman who had had headaches for 15 years. At operation by Lynch, the sphenoid was infected and the floor was found to be about $\frac{1}{8}$ inch thick when normally it should be about $\frac{1}{32}$ inch thick, showing long-continued suppuration. Drainage of the deep sinuses is the only thing that is going to give relief in such a case.

One other type of headache I want to mention which Dr. Bahn did not mention, and that is the sportsman's headache, the type the modern sportsman suffers from. I have made some interesting observations on that type. I noticed that I never had a headache when I shot ducks but did get one when I went quail shooting. One day I realized that in quail shooting the hunter shoots against the wind so the dogs can catch the scent of the birds, while in duck hunting he shoots to leeward and thus does not breathe the fumes from the discharge of powder. Most of the smokeless powder is made from nitro compounds and partial oxidation could very easily form nitrites. Certainly, this headache, which is throbbing in character, is identical to that produced by nitrites or nitroglycerin.

CLINICAL EXPERIENCES WITH AVERTIN*

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NEW ORLEANS.

Before the Great War the anesthetics of choice for general surgical use, particularly

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in this country, were ether and nitrous oxide with oxygen. Except in isolated clinics, spinal and chloroform were considered as too dangerous for the ordinary run of cases and were therefore used only in individualized cases. Since 1920 renewed interest has brought about improved technics and the addition of several new drugs of more or less distinct value. Accordingly, ethylene made its advent, further studies on local anesthesia taught us the value of anterior and posterior splanchnic infiltrations, and spinal has attained a rather marked degree of popularity mainly because of a better understanding of the physiology of the spinal cord and improved technics for its administration. During the past five years a number of new drugs have been proposed and several have received prominent attention. Among these the most prominently mentioned¹ have been the barbituric acid derivative, known as sodium amytal, particularly well known in this country, and the bromide preparation, known as tribromethanol recently introduced by the Germans.

Since January 24, 1931, the author has had occasion to use tribromethanol in 164 surgical cases, 155 of them being operated upon in the Charity Hospital surgical service of Dr. Maurice J. Gelpi. Among the entire number, 146 were operations upon the abdominal and pelvic cavities, five were operations upon the neck, eight upon the thorax, three upon the extremities, and two in the mouth cavity. The present study is based principally upon observations made on these cases.

CHEMISTRY.

Tribromethyl alcohol, or avertin as it is better known, is a white crystalline powder with the formula $\text{CBr}_3 \text{CH}_2 \text{OH}$. It contains 85 per cent bromide and was first prepared by the reduction of bromal. It decomposes in light and air, is soluble in water up to 3.5 per cent at 40°C ., precipitates out of a solution below 37°C ., and above 45°C . the molecule breaks up to form hydrobromic acid and dibroma-

cetaldehyde both of which are intensely irritating to the intestinal mucosa. The drug is marketed in dark bottles in the form of avertin amylene hydrate, the amylene hydrate being used because avertin is readily soluble in this vehicle and because it is a respiratory stimulant. Avertin was first prepared by Willstatter and Duisberg in 1923, and first administered to a human being on March 27, 1926, by Eichholtz in Germany.² Since then it has been used in over 300,000 cases in Germany being introduced into this country about two years ago.

Although experimentally it has been used intravenously,³ orally and subcutaneously, avertin is recommended as a basal anesthetic to be given by rectum. Clinically it is administered in this manner in an aqueous solution at 40°C . Avertin is absorbed very rapidly from the intestinal mucous membrane, much more rapidly than the water in which it is dissolved (Straub).¹ Approximately one-half to one hour after rectal administration it has all been absorbed. Post-operative flushing of the rectum for removal of the excess is consequently rendered useless.

PHARMACOLOGY.

In from three to six minutes the patient drops off into a seemingly natural sleep which rapidly gets deeper, apparently reaching its maximum in from 30 to 45 minutes. Any respiratory or cardiovascular disturbance will usually appear during this period of time. Elimination is chiefly by way of the kidneys through which 50 to 70 per cent passes during the first 24 hours (Parsons⁴). The remainder is eliminated mainly by way of the skin. Although avertin is eliminated slowly, several authors have reported its successful use on successive days especially in cases of tetanus. Upon being absorbed detoxication takes place in the liver³ where it combines with glycuronic acid to form urobromalic acid.

Avertin exerts its chief influence upon the central nervous system acting quite definitely as a respiratory depressant.

Accordingly, respiration becomes slower and more shallow. Toxic doses may reduce the respiratory rate to 6 or 8 per minute. The corneal reflexes are absent and the pupils contracted. It is quite plain, then, that the action of this drug is quite analagous to that of morphine. Although morphine has been given all our patients just before sending them to the operating room the author now feels that this drug might be safely withheld in all cases receiving avertin. Since the drug is a depressor of the respiratory center the addition of morphine only tends to further this undesirable action. Combinations with other drugs should be avoided, especially so if the other drug has a depressing action upon the center of respiration.

The influence of avertin upon the cardio-vascular system is rather definite but not very marked. A preliminary acceleration of the pulse rate appears coincidental with a drop in blood pressure of from 5 to 40 mm. of mercury. This drop is most usually less than 20 points, the greater drops being seen only occasionally. This is followed by a subsequent rise in pressure and slowing of the pulse. Peripherally there is strong evidence of vasodilatation. The cheeks, nose, and ears usually present a perfectly pink color. This has been true of all cases except those in which there has been cessation of respiration or cardio-vascular disturbance.

CLINICAL OBSERVATIONS.

Avertin was at first thought to exert a very toxic action upon the liver. Several deaths reported in the literature were said to have resulted from fatty degeneration of the liver caused by its use. In this series the only death showed a fatty degeneration of the liver as the only pathology at post mortem. However, since the case was one of thyrotoxicosis which developed a post operative auricular fibrillation there may be some question as to whether the death was entirely one of fatty degeneration of the liver in spite of what turned

out to be a normal heart muscle. Nevertheless, the author feels that this liver pathology resulted from the avertin.

The case was that of a white female, 43 years of age, presenting a rather clear-cut picture of hyperthyroidism. She had been resting at home six weeks before being admitted and during this time was given Lugol's solution. Upon her admission to the service the basal metabolic rate was found to be plus 85. Further rest over a period of ten days with a let up in the administration of Lugol's solution resulted in a basal metabolic rate of plus 61. At this time the patient was in a very good condition clinically, as shown by a pulse which ranged from 80 to 96 during the three days preceding operation, and a calmness which was rather marked. Although she knew she was to be operated upon she had no idea when this was to occur. Methods were adopted whereby she was not aware of the rectal administration of avertin and the condition during the operation was very satisfactory, the pulse averaging between 80 and 100. Ethylene was used as the supplemental anesthetic agent. A subtotal thyroidectomy was performed without any difficulty. Several hours later the pulse became rapid and in spite of intravenous digitalis the rate gradually increased, the patient dying after 48 hours. Autopsy failed to show any pathology of importance except that observed in the liver, the pathological department reporting "fatty degeneration of the liver" as the cause of death. The avertin dosage in this case was 100 mg. per kilo body weight as in practically all the other cases.

Two other phenomena of considerable importance were observed in this series of cases. The first was a state of mild excitement observed among three cases. The excitement manifested itself in the form of crying and moaning that was not especially annoying and which disappeared immediately upon the administration of the supplemental anesthesia, not to return. At no time did the excitement assume unbearable or unmanageable proportions and at no time did it become necessary to restrain the patient. The other phenomenon of interest was the onset of a sneezing attack in a young man 24 years of age, the attack lasting about 10 minutes during which time the patient sneezed about 25 times. This also disappeared upon the administration of the supplemental anesthetic which was ethylene.

Although the drop in blood pressure varied from 5 to 40 points, no case presented any signs of cardio-vascular disturbance. All cases showed definite slowing of the respiration and five presented serious respiratory disturbance in the form of cessation. This type of trouble lasted from two to six minutes. As the patient stopped breathing the lips became blue and the pink color of the cheeks, nose, and ears disappeared, giving way to a marked cyanosis. The patients appeared on the verge of disaster but fortunately each one reacted satisfactorily following the use of adrenalin and caffein sodium benzoate. One of the five cases should probably be excluded from this group because through a misunderstanding this patient, who was 53 years of age, received ten grains of chloral hydrate and $\frac{1}{4}$ grain of morphine in addition to the avertin. Since all three drugs depress the respiratory center markedly it is little wonder that the patient ever reacted. Needless to say a supplemental anesthetic was unnecessary throughout the entire procedure which lasted 75 minutes, and which consisted of a thorough exploration of the abdominal and pelvic cavities, followed by the removal of the appendix and gall bladder.

DOSE AND METHOD OF ADMINISTRATION.

The youngest patient among this series was 12 years of age and the eldest 55 years. All patients ranged between 12 and 30 years, except ten which were between 40 and 45 years, only three being over 50 years, and eight between 31 and 39 years. Therefore, among the 164 cases in this series, 146 were between 12 and 30 years of age. All of them belonged to the group favorable for selective surgery, and all were in good physical condition. Accordingly, the author feels justified in having used a dosage of 100 mg. per kilo body weight on all cases except one.

The patient is weighed the evening before operation and given an enema which thoroughly cleans the large bowel. At about 8 o'clock she is given 2 gr. of sodium

luminal and 30 gr. of sodium bromide in order to insure a good night's rest. The next morning the avertin solution is administered from 20 to 30 minutes before the patient is sent to the operating room. The method of preparation is purposely being omitted, as is also the method of administration for lack of time. As soon as the patient is asleep she is given $\frac{1}{6}$ gr. of morphine and $\frac{1}{150}$ gr. of atropine. On her way to the operating room care is taken to keep the head to the side in order to prevent falling back of the tongue and asphyxiation. Except in the ten cases which presented some type of unfavorable reaction the general condition of the patient usually appeared to be satisfactory. Of course, the respirations were more shallow and less frequent than before the administration of the drug, but this was not very marked in the 154 cases giving a favorable impression. At no time during the operative procedure was there any alarm concerning any patient's condition. Some European investigators feel that the bleeding time is slightly decreased. Most of them agree that there is little or no change in the blood elements. While no attention was paid to the number of cases upon whom operations might have been performed without the assistance of a supplemental agent, using the drug only as a basal anesthetic, a number of cases showed definitely that no supplemental anesthesia was necessary. In fact, several cases were operated upon without the addition of any other anesthetic agent. As a rule relaxation was excellent. While not comparable to the relaxation we see in spinal cases, still, it was generally better than the relaxation obtained by any one of the other anesthetic agents. Rarely the relaxation is almost as complete as is seen in spinal anesthesia. A number of cases had to be given somewhat more of the supplemental anesthetic agent than others in order to secure the best results, especially with reference to relaxation. Every one of the 164 cases left the operating table in good condition and none of them necessitated

close postoperative attention except the case of hyperthyroidism above described. In the entire series flushes for distention were used in only five cases. In two cases, tendency to a postoperative ileus was marked, each requiring the administration of pituitrin and frequent flushings. The cough reflex usually returned within one to two hours after the patient came back from the operating room. The average time the patients were asleep ranged between two and seven hours, most of them reacting after approximately $3\frac{1}{2}$ hours. Upon reacting they usually complained of pain, but without administering any morphine they usually turned their heads and went back into a natural sleep for another period of from one to three hours.

In about 30 per cent of the cases it became necessary to catheterize the patient one or more times. One case developed a postoperative cystitis as a result of this. Vomiting and nausea were observed in only three cases in the entire group, and in none of these three could it be said the reactions occurred from the use of the avertin. The postoperative reaction was perfectly peaceful in each case, none of them showing any excitement. As a rule ether was used as the supplemental anesthetic agent principally because of its ability to stimulate the respiratory center in small doses. The combination forms the most ideal method of anesthesia that I have yet observed aside from that seen with spinal. It appears to be far superior to ethylene or ether alone in many ways. The patients themselves speak very favorably of having gone through the experience, and those who had been operated upon previously, usually preferred this method. There has been no evidence of postoperative ill effects that could be attributed to avertin in this series of cases. Approximately 25 to 30 per cent of the cases have been seen or heard from and in no one case was there any thing for which avertin could be blamed. Both the

mental and physical state of these patients was very satisfactory.

USES OF AVERTIN.

Avertin may be used as a basal anesthetic in practically all general surgical conditions. It has been found satisfactory in obstetrics.^{6, 7} Because of abolition of the cough reflex⁸ it is not as satisfactory for use in throat operations as ether,⁹ and for such procedures its use is inadvisable. However, when dealing with highly nervous people,² thyroid disease, especially those with hyperthyroidism, fractures in the old, and operations upon the mouth, where the use of the cautery is needed, it probably has no equal, though it is not entirely ideal. In the present series the cautery was used for a mass on the hard palate in one case. Although this patient moaned during the procedure on awaking she admitted having no knowledge of the occurrence and agreed to take the drug again should it become necessary. Needless to say, avertin should not be used in cases presenting surgical diseases of the rectum and colon.

CONTRA-INDICATIONS.

While these are not many the drug is probably most dangerous in such conditions as advanced diseases of the liver and kidneys,² cases of extreme cachexia, septicemia with marked anemia, cases of marked hypertension, and ulcerative conditions of the rectum and colon. The general rule has been that the younger the individual the more tolerance there appears to be to the drug. Elderly people above 50 years of age should never be given a dose of more than 90 mg. The preoperative administration of 5 per cent glucose, 500 c.c., appears to be of great benefit in these elderly patients and we have done this routinely.

DANGERS IN THE USE OF AVERTIN.

In spite of its use as a basal anesthetic with the dosage never exceeding 100 mg. the author feels, as L. R. Wharton,¹⁰ of Baltimore, expressed himself, that it is not entirely fool-proof. The fact that respiratory paralysis may occur even with doses not exceeding that required for basal

anesthetic purposes, and that some individuals, whom we have no way of knowing, present idiosyncrasies to the drug, is not to be taken lightly. Reasons for serious concern about a patient's safety in 10 out of 164 cases makes me feel that the drug, used in doses of 100 mg., is not quite safe enough to be recommended routinely. The feeling prevails, among those of us who have watched these patients, that avertin can probably be used in from 60 to 80 mg. doses with considerable more safety. Another danger of importance is that of overdosage which may easily occur. Unless the error is recognized early, flushing of the rectum and colon will be of no benefit. Under such circumstances the administration of thyroxin is said to assist in its rapid elimination. The danger of administering an unfit preparation is always to be kept in mind. Avertin should never be given without first testing the solution at hand with Congo red. Preparations showing decomposition should always be discarded and a fresh solution prepared.

From a review of the literature, Lundy³ calculated the death rate of avertin as 1 in 3,333 cases. Forty years ago Hewitt's figures gave the intrinsic death rate of chloroform and ether as 1 in 3,162, and 1 in 16,302, respectively. Although the figures for avertin and chloroform are very similar, avertin unlike chloroform has very little effect upon the heart muscle (Parsons).⁴

ADVANTAGES OF AVERTIN.

In spite of the above dangers there can be no question but that the drug is a desirable addition to our armamentarium of anesthetic agents. The fact that a patient can be very quietly put to sleep in his or her room before being taken to the operating room is very desirable. All the disagreeable features attending transportation, operating room scenes, etc., are eliminated entirely, the patient awaking where he or she went to sleep. Psychic shock, therefore, becomes a matter of minor importance. Avertin is of special benefit in thyroid

cases especially those with hyperthyroidism. Rienhoff,¹¹ who has compared the basal metabolic rates in these cases immediately before and during narcosis with avertin, found a drop of from 10 to 30 points. Toxic thyroid cases may be operated upon when they least expect it and most authors speak of very gratifying postoperative courses as a result of this.

Cases given avertin present better relaxation and permit of better work than those operated upon under ether or ethylene alone. Usually a small amount of ether is all that is needed to give an excellent anesthesia. After the first hour the dangers of respiratory or cardiovascular collapse have practically entirely passed and these cases do not need any more postoperative watching than patients operated upon under ether, ethylene, or nitrous oxide and oxygen.

CONCLUSIONS.

1. A series of 164 cases is herewith presented upon whom tribromethyl alcohol was used as the basal anesthetic in doses of 100 mg. per kilo body weight.

2. Very satisfactory clinical results were obtained in all except 10 cases, one of which died. It is questionable whether this was a true avertin death.

3. Avertin is a good addition to the field of anesthesia. Properly used as a basal anesthetic it might come close to solving our search for an ideal anesthetic.

4. The contra-indications are few but very important.

5. There are many advantages in the use of avertin.

6. Avertin is not entirely safe for the patient.

I want to express my sincere and deep appreciation to Drs. Maurice J. Gelpi, chief of our service, and P. A. Philips, who with the internes, nurses, and sisters made these observations possible.

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DISCUSSION.

Dr. Gage (New Orleans): That we are continuously striving for an ideal anesthetic is shown by the large numbers of drugs that have recently been put on the market for anesthetic purposes. One of these drugs is used rather extensively at present, for both basal and surgical anesthesia. This drug, known as avertin, was first introduced in Germany, and has recently been distributed in this country.

I believe that avertin is very useful when used as a basal anesthetic, as it relieves the psychic strain, renders the patient unconscious to his surroundings and decreases the amount of supplementary anesthetics.

In our service at Charity Hospital, we have used avertin in over a hundred cases as a basal anesthetic, and have not had any untoward results. I believe that our good results have resulted from accurate attention to the details of its administration as well as selection of cases and the use of not more than 100 mg. per kilo of body weight. In no instance have we tried to obtain complete surgical anesthesia. Supplementary anesthesia was necessary in over 80 per cent of our cases. The anesthetic of choice used as a supplement has been ether. The average amount of ether used has not been over three ounces.

Any drug having anesthetic qualities that is rapidly absorbed is dangerous to the patient, and avertin comes under this category. Therefore, I consider avertin to be dangerous and it should not be used indiscriminately. The administration of the drug for anesthetic purposes should be supervised by one who is cognizant of advantages and disadvantages, indications and contraindications. Every direction necessary for its safe

application should be adhered to and the danger signs should be constantly kept in mind. Then, and only then, does the drug become comparatively safe. Avertin should not be used in the aged and debilitated, those suffering from jaundice and liver insufficiency, those with renal impairment (as most of the drug is excreted by the kidneys) and individuals with decreased pulmonary ventilation.

Regarding the death reported by Dr. Loria, I believe that the patient referred to, probably died of an acute postoperative thyrotoxicosis and not from avertin. The changes found in the liver; *i. e.*, fatty degeneration, could be accounted for by the hyperthermia. However, as Dr. Loria has said, it is very hard to determine the agent responsible for the death in this patient as it could so easily be ascribed to either the avertin or to the post thyroid state.

Dr. M. Gelpi (New Orleans): No one can be interested in surgery without also being interested at the same time in the subject of anesthesia. The question, of course, in discussing the anesthesia problem always arises as to, first, the efficiency, and second, the safety of the drug used to produce anesthesia.

You must not forget when we are discussing anesthesia that there is always the question of the use of a powerful agent. All of the anesthetics are depressants; some of them of the circulatory system; some of the respiratory system; and some of the cerebrospinal system; but all depressants in varying degrees. So we have been working on the principle that when we have to use such strong agents it is a good idea whenever possible, to use a number of these agents in small doses to produce our effect, rather than to use a tremendous dose of just one thing, as of ether for instance. Along these lines we have for a long time been supplementing or preceding our general anesthetic, or our spinal or local, with something before the patient goes down to the operating room. We have used various agents, such as scopolamine, morphine, morphine and magnesium sulphate, sodium amytal, and chloretone with morphine.

I can testify to the fact that sodium amytal by mouth in moderate doses, possibly with morphine, brings the patient down in a better mood, and necessitates less ethylene, less ether, less of a general anesthetic, and is safe. We had been working along these lines when Dr. Loria became quite enthusiastic, after observing Dr. Gage, on the question of avertin, and he persuaded us to let him try it out on a series of cases in the service. Taking it all in all, I feel that this trial has been very interesting and very instructive.

I can testify to the fact that, so far as efficiency goes, this drug in 100 mg. doses for the ordinary

case brings the patient down in an apparently restful sleep, quite relaxed, and certainly free from apprehension and fear. By the way, the relaxation is quite striking, although, when compared to the relaxation of spinal, it is by no means so delightful. I do not know anything that will relax an individual as spinal will. Avertin, plus ethylene or ether, has produced very satisfactory anesthesia for everything that we encountered while trying the experiment with 150 cases in the ward.

On the other hand, so far as safety goes, I can testify that this 100 mg. of avertin is capable of producing a profound effect on the respiration. What frightened me was one particular case to which Dr. Loria referred, a case in which I removed the gall bladder. It may be that this patient had an overdose. The patient turned out to have marked cirrhosis of the liver and had by mistake received a dose of chloral hydrate, given with morphine. That individual showed marked cyanosis which lasted for so long a period that I was worried. She was so affected by something or a combination of things, certainly avertin contributed, that we were able to complete the whole procedure without any other assistance in the way of an anesthetic. That, I think, is extremely undesirable.

So far, from our observation of these few cases, I feel that avertin has a definite value but do not feel that it should be used in doses sufficiently large to produce such a condition as I have described. That patient's respiration went down to as low as eight; as a matter of fact, I did not think she was breathing at all. Therefore, I do not feel that 100 mg. is a safe routine as a basal anesthetic. The respiration is profoundly affected by the drug, and, if I were to go back to it as routine, I would try it out in 75 or 80 mg. doses and feel much safer. Anything that affects the respiration to that extent should be used in small doses.

I feel that this little experiment has proved to us that avertin has a definite value but that the 100 mg. dose is too large for routine basal anesthesia.

I enjoyed Dr. Loria's excellent paper. I think he made a fair estimate of the effects of avertin, and I am very glad he persuaded us to make this trial. I feel that we have learned much from this comparatively small number of cases. This means personal experience and that is always very valuable.

Dr. R. A. Cutting (New Orleans): Dr. Loria is to be congratulated on his excellent presentation and upon his impartiality in judging of results.

Perhaps I have not personally given avertin quite as many times as Dr. Loria, but two or

three things in connection with my modest experience has impressed me. First, with regard to the preliminary preparation of the rectum and colon. Inasmuch as the drug must be absorbed by the mucosa of the lower portion of the gastrointestinal tract it is very necessary that the mucosa of the bowel be clean, consequently that enemas be carefully given the night before the administration of the drug. With a conscientious nurse to make the necessary preparation of the bowel I have noticed that the action of avertin is usually simple and satisfactory. On the other hand a neglectful or careless nurse is frequently responsible for the fact that the avertin is not absorbed so rapidly and the anesthetic action of the drug is not so satisfactory.

Under the influence of avertin a patient usually goes to sleep without any excitement whatever and with surprising rapidity; absorption of the drug from clean mucosa is very rapid. After the first three or four minutes patients customarily do not remember anything of what may be said or may go on in the room.

Usually from 60 to 125 mg. per kilo of body weight has been recommended as a suitable dose in the literature. I usually have administered as Dr. Loria 100 mg. per kilo of body weight. I feel with Dr. Gelpi, however, that this is a fairly large dose, larger than is perhaps needed. Most of the individuals who adopt avertin as an anesthetic agent seem to be obsessed with the idea that it should produce complete surgical anesthesia, and I can not emphasize too strongly that this is precisely what is not desired. Avertin's field of usefulness is confined to basal anesthesia.

That leads me to my final statement which is in regard to the mortality statistics which Dr. Loria has quoted to us. In his discussion we note that in the early days of the use of avertin a much larger dose was used, larger than is perhaps needed.

Certainly the mortality rate with a dose of 60 mg. per kilo of body weight would be much lower than the general mortality rate which was quoted, and which was compiled without regard to the large quantities administered in the earlier days of the introduction of this valuable anesthetic agent.

Dr. Cohn (New Orleans). We have all heard about a great many ideal anesthetics. We have had rectal anesthesia, ethylene and nitrous oxide, spinal anesthesia, sodium amytal, avertin and many others. I should just like to sound a note of warning in this connection.

You will all remember Mr. Lane was able to remove the colon without any trouble and able to operate on all fractures without trouble, but when others tried to follow his lead they got into trouble. What is good in the hands of men who have had special experience with avertin its

use may be all right, but the average surgeon had better avoid these more dangerous drugs until proper safeguards have been found.

Dr. Loria said that less morphin is needed in these cases. The question of the quantity of morphin needed postoperatively is directly proportionate to the amount of handling of tissue, the amount of exposure and the length of time the operation is in process. I might call to your attention the fact that the statement was made that sodium amytal is safe. Sodium amytal is not free from danger. We have recently had an extremely unfortunate experience in which sodium amytal was given preliminary to operation. The patient had respiratory failure and all efforts to bring him back were unavailing. Anyone who has had an experience like that will not say that amytal is free from danger.

I want to call your attention to the report of the Anesthetic Commission many years ago: Chloroform should not be used in short operations because it is too dangerous—it should not be used in long operations because it is too dangerous. This may serve notice on those who believe too implicitly in premature conclusions.

Dr. King (New Orleans:): I want to ask just two questions. Dr. Loria tells us that after 45 minutes the condition was very satisfactory. I should like to know what was the matter during the first 45 minutes?

Dr. Loria (closing): I want to answer Dr. King by saying that the most deleterious effects seen by us in using avertin occurred usually within a period of 30 to 45 minutes. After that, our experience tends to show the patient appears absolutely safe from immediate danger. In the use of spinal some authors claim a fixation of the drug used within a period of 20 minutes, after which the patient subjected to this anesthesia is said to be beyond the period of immediate danger.

Our observations show that after 45 minutes no signs of danger appeared in the use of avertin in this series.

There is no ideal anesthetic. I have not come here tonight with the purpose of presenting this paper and holding avertin out as the ideal anesthetic. I have simply come to outline our experiences with this new drug. Avertin has been used on a few of my cases in private practice with satisfactory results. At this time I have attempted to give an impartial description of what has occurred in this series of 164 cases, and if I have not made myself clear, I want to take this opportunity to change your ideas.

With reference to the dose and dangers in older people I shall answer that it is being used extensively in the clinics of the East and North as also in Europe without fear. Most of the time, however, and I agree with Dr. Gelpi, it

should be used in smaller doses and cautiously in them.

In Dr. Gelpi's service, we have taken the added precaution of administering 500 c.c. of 5 per cent glucose 1½ hours before giving the avertin. We feel that the administration of 25 gm. of glucose is worth while. I believe this increases the glycogen content of the liver and minimizes what truly appears to be a hypothetical danger to this organ, for as we all know the liver is not in as good condition in elderly people as in the young.

In Baltimore, avertin has been given in over 3,000 cases without a death. I want to agree with Dr. Gelpi in saying that with the experience at hand we might better use smaller doses of avertin, 60, 70, or 80 mg., and perhaps to stop altogether the use of morphine. This may be tried in future cases.

As for amytal we have used it only as a basal anesthetic and we consider the smaller doses, given by mouth, to be quite safe. We have not used it intravenously—we have hesitated to do so.

DIAGNOSIS OF CHRONIC UPPER ABDOMINAL DISEASES.*

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The remarks in this paper are dedicated to that physician who, when the occasion arises, is man enough to tell the patient he is unable to make an accurate diagnosis of his digestive disturbance, rather than to give a meaningless diagnosis, such as "congestion of the liver." Frankness toward the patient develops within the physician that healthful humility necessary to make him a profound student of those pathologic changes which disturb the physiology of the gastro-intestinal tract. Hurst, of London, has discussed in a very excellent manner such worthless diagnoses as "congestion of the liver" under the heading of "Mythical Maladies." Included in this group are the much overworked terms, "movable kidney," "gastroptosis," "pelvic cecum," "dropped colon," "adhesions," "mucous colitis," and "auto-intoxication."

The physician most successful in dealing with gastro-intestinal diseases is he who combines experience with a knowledge

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of physiology, and who is capable and willing to take a complete history of the patient's illness. He must make a careful physical examination and must realize that a roentgenogram is only as valuable as one's ability to interpret what it reveals.

CHRONIC DISEASES OF THE ABDOMEN

Diseases most frequently encountered:

- (1) Cholecystitis.
- (2) Peptic ulcer.
- (3) Appendicitis.
- (4) Cancer of the stomach.

Diseases which should be considered in differential diagnosis:

- (1) Intestinal allergy.
- (2) Gastric syphilis.
- (3) Epigastric hernia.
- (4) Certain heart diseases.
- (5) Hydronephrosis.
- (6) Diseases of the ureter.
- (7) Diverticulitis.
- (8) Gastric crises.

Diseases producing vague digestive symptoms:

- (1) Nervous indigestion.
- (2) Various neuroses.
- (3) Early cirrhosis of the liver.
- (4) Cholangitis.
- (5) Hepatitis.
- (6) Many diseases of the colon.

PEPTIC ULCER

- (1) Chronicity (Average 11 years).
- (2) Periodicity:
 - (a) Symptoms: weeks or months.
 - (b) Worse in spring and fall.
- (3) Character of symptoms:
 - (a) Pain epigastric.
 - (b) Distress one to four hours after eating.
 - (c) Clock-like regularity.
 - (d) Relief by food, soda, or emesis.
- (4) Complications:
 - (a) Cancer.
 - (b) Hemorrhage.
 - (c) Perforation.
 - (d) Obstruction.
 - (e) Adhesions.
 - (f) Alkalosis or tetany.

Of the three cardinal symptoms of peptic ulcer—pain, periodicity, and food ease—pain is probably the most constant and most characteristic. This symptom, referred to as “hunger pains,” is in reality but an exaggeration of the normal physiologic condition of hunger, and is produced by exaggerated peristaltic waves passing over an empty stomach. The clock-like regularity with which it occurs, and the quick relief obtained by food or alkali is striking, and is very frequently emphasized by the patient if he is allowed to tell how he suffers. Periodic attacks of indigestion during weeks or months, followed by a remission and complete relief for several months, is another important symptom. Just why the peptic ulcer is most likely to flare up in the spring and fall is not known; it may be due to peculiarities in diet during these seasons.

Peptic ulcer presents the purest clinical syndrome. The symptoms are so typical that they should be used as a standard with which other digestive disturbances may be compared. Practically all ulcer symptoms are dependent upon a disturbed gastric motility, the spasm induced, and the reverse peristalsis which is set up by an irritating lesion.

Much has been said recently about the ulcer type of individual. In a general way, these persons do seem to have some characteristic in common. They are intensive and persistent. They work fast and eat fast, accomplish all they can, and worry over what they miss. They are optimistic and cheerful, in contrast to the type with gall bladder disease, who is somewhat depressed and disgruntled about everything.

The ratio of duodenal to gastric ulcers is 9 to 1; however, when a gastric ulcer is discovered, much more thought must be given the diagnosis because of the high incidence of gastric cancer. One-third of all cancer deaths are from cancer of the stomach! The roentgenologist is our greatest aid in distinguishing between a simple and a cancerous ulcer. Intrinsic lesions of

the stomach should be accurately diagnosed by the roentgenologist in about 92 per cent of cases. However, in a large series of gastric ulcers regarded as benign and operated upon, 2.1 per cent proved to be malignant. Lahey has said that less than 10 per cent of gastric ulcers undergo malignant degeneration. This, if true, should be a strong argument for surgery in many of these cases.

(1) Ulcer patient, aggressive, worrying type.

(2) The more typical the symptoms, the nearer the ulcer to the pylorus.

(3) Diffuse epigastric pain suggests duodenitis.

(4) Night pains are danger signals.

(5) Low or absent acids point to cancer or cholecystitis.

(6) Persistence of symptoms spells complications.

(7) Gastric cancer is responsible for one-third of all cancer deaths.

(8) 2.1 per cent of ulcers of the stomach diagnosed benign were cancerous.

(9) A mass felt in the upper abdomen is cancer in 92 per cent of cases with history of dyspepsia.

(10) Perforating ulcers mimic cholecystitis.

(11) Marked epigastric tenderness suggests perforation.

(12) When food fails to relieve, think of a complication.

CANCER OF THE STOMACH.

(1) Apprehensive, docile attitude of patient.

(2) Progressive decline. Loss of

(a) Appetite.

(b) Vitality.

(c) Weight.

(d) Strength.

(3) Constantly recurring distress.

(4) Remedies ineffectual.

(5) Test meal shows

(a) Altered blood.

(b) Rancid food (lactic acid—Oppler-Boas B.)

The thought of our failures in dealing with cancer of the stomach is indeed depressing. With our present methods of treating cancer, the problem seems to resolve itself into (1) the education of the public, (2) a careful examination of all patients above the age of forty whose history suggests the slightest dyspepsia, and (3) a more serious attitude toward all gastric ulcers. It has been shown that 32 per cent of all patients with inoperable cancer of the stomach experienced symptoms for sixteen months before coming to the physician. The fight against cancer, therefore, is a fight for early diagnosis.

The symptoms produced by a cancer of the stomach depend largely upon the portion of the stomach involved and whether it has been implanted upon a chronic benign ulcer. The most commonly observed symptom is a chronic, ever-progressing, down-hill course of the disease. Practically all other forms of chronic dyspepsia show a tendency toward remission. If a middle-aged or elderly person complains of epigastric fullness after meals, with some discomfort or pain, a failing appetite and a feeling of slight weakness, cancer should be considered until its existence can be disproved.

(1) Produces 35,000 deaths per year in this country.

(2) If cardiac end of stomach is involved, there is severe anemia.

(3) The roentgen ray is accurate in 98 per cent of cases.

(4) Must think of cancer even though roentgen ray diagnosis is benign gastric ulcer.

(5) If sign suggests cancer, do not consider a positive Wassermann.

(6) Cancer of the stomach almost never produces gross hemorrhages.

(7) If a mass can be felt to the left of the mid-line, the case is probably inoperable.

(8) Look for metastases above the left clavicle.

(9) It is more important to determine relieve it.

(10) If treatment is delayed until typical symptoms develop, the patient is lost.

(11) Treatment of chronic indigestion without making an roentgen ray is inexcusable.

(12) If the symptoms of an ulcer patient change, think of cancer.

SYPHILIS OF THE STOMACH.

Gastric syphilis is not nearly so rare as is generally supposed. It is of the greatest importance to avoid confusion of this disease with gastric cancer, which it so closely simulates. On the other hand, a deforming lesion of the stomach should not be considered syphilitic merely because the patient has a positive Wassermann.

From the standpoint of symptoms, syphilis of the stomach may be divided into three groups: (1) Those patients who seem to have but little room in the stomach for food, as seen in linitis plastica; (2) the pseudo-cancer type; and (3) the ulcer type.

Roentgenologic examination is indispensable in making the diagnosis. In a general way, these patients present the roentgen appearance of an advanced cancer of the stomach; however, when the roentgenologist feels a large epigastric mass and the patient seems entirely too well and strong for such an advanced cancer, he immediately thinks of lues. This is also true clinically.

CHRONIC CHOLECYSTITIS.

(1) Gas.

(a) Upper abdominal distention directly after eating.

Belching.

Pyrosis.

(2) Qualitative food distress.

(3) Relief with alkali variable.

(4) Remissions uncertain and last several days only.

(5) Tenderness right upper quadrant; transient.

(1) Symptoms of cholecystitis.

(2) History of colic.

(a) Sudden onset and cessation.

(b) Grunting respiration.

(c) Hypodermic for relief.

(d) Pain in right upper quadrant or epigastric, referred to scapular region.

(e) Vomiting.

(f) Residual tenderness.

The most common organic disease affecting the gastro-intestinal tract is cholecystitis. The next in order is peptic ulcer. Cholecystitis and peptic ulcer are very frequently associated, and gall bladder disease occurs much more often with duodenal than with gastric ulcer. Cholecystitis is present in about 14 per cent of duodenal ulcers and in about 8 per cent of gastric ulcers. On the other hand, in a very large series of diseased gall bladders, peptic ulcer was found in only 7 per cent.

The symptoms of cholecystitis and peptic ulcer are in many cases so similar that the internist need not feel ashamed if he makes a diagnosis of gall bladder disease and the surgeon finds a peptic ulcer or a diseased appendix.

A careful clinical record is a most trustworthy aid in diagnosis. A duodenal ulcer, especially if it tends to perforate, may mimic gall bladder disease. Also, when the pain is referred to the chest, it is often mistaken for angina pectoris. Regular attacks of pain, which are relieved by food, points to ulcer; qualitative food distress and pyrosis, often aggravated by food, are suggestive of gall bladder trouble. The gall bladder patient has a capricious appetite, whereas the ulcer patient is always ready to eat. The gall bladder patient is more addicted to soda than is the ulcer patient. It is unusual for the pain of ulcer to be referred to the shoulder region, but this is a common symptom in diseases of the gall bladder.

Time will not permit a discussion of the value of all the information to be obtained by a physical examination. The opinion of an expert roentgenologist is second in point

of necessity. The roentgen examination must be complete in every detail. Not only should a Graham-Cole test be made, but the stomach and duodenum should be studied for intrinsic lesions and reflex irritation. The function of the gall bladder can be determined with fair accuracy by the Graham-Cole test, but unfortunately, the pathology and physiology of the gall bladder do not always run parallel. Granted that the dye has not caused undue nausea, vomiting, or diarrhea, and the roentgenograms are of good quality, a failure to obtain a cholecystogram may be interpreted as evidence of disease. It should be remembered, however, that dense cholecystograms may be obtained in the presence of considerable pathologic change. The greater danger of error in diagnosis arises when only a faint cholecystogram is obtained. While the gall bladder is diseased, it is still able to function. The clinician should accept the result of the Graham-Cole test as an accurate estimation of the function of the gall bladder at the time the examination is made, rather than as an index to the extent of the pathology. In determining the nature of the pathology and its part in the production of the patient's symptoms, we must correlate the roentgen ray report with other clinical data.

A positive Graham-Cole test is most valuable, but a negative test does not necessarily mean that the gall bladder is normal.

The Lyon-Melzer duodenal drainage is of value only in the treatment of psychoneurotics. In my opinion, it has no real value either from the standpoint of diagnosis or treatment.

CHOLECYSTITIS.

Three Groups:

- A. Colics and good digestion afterward.
- B. Colics followed by dyspepsia.
- C. Chronic stomach trouble, no colics.
 - (1) Stone in common duct gives chills, fever, and jaundice.
 - (2) Cholecystitis may mimic peptic ulcer (3 per cent).

- (3) Cholecystitis is frequently associated with peptic ulcer.
- (4) Hematemesis occurs in 2 to 4 per cent of cases.
- (5) In 20 per cent of cases hyp acidity or achlorhydria is found.
- (6) Tumor in gall bladder region plus cholecystitis: think of
 - (a) Empyema of gall bladder.
 - (b) Distention of gall bladder from stone in cystic duct.
 - (c) Cancer involving the bile ducts.
- (7) Exclusive of stomach, the gall bladder is responsible for 50 per cent of the dyspepsias.
- (8) Thirty per cent of cases of stone in the common duct gave history suggestive of common duct stone.

CHRONIC RECURRING APPENDICITIS.

- (1) Irregularity of attacks
 - (a) In character.
 - (b) In relief.
- (2) History of chronic stomach trouble.
- (3) History of acute attacks.
 - (a) Colics.
 - (b) Attributed to some food.
 - (c) Sense of fullness and obstruction in right lower quadrant.
- (4) Palpation.
 - (a) Local tenderness.
 - (b) Epigastric distress with pressure over appendix.
 - (c) Residual tenderness.
 - (d) Muscle rigidity.
 - (e) Pain with jarring.

Carnett, Boles, and Bockus have repeatedly expressed their belief that the factor of chronic appendicitis in causing serious reflex indigestion has been greatly exaggerated. This is undoubtedly true, yet recurring attacks of appendicitis do produce reflex pylorospasm and attacks of dyspepsia, and in many cases such varying groups of symptoms that its diagnosis is often the most difficult in the practice of medicine. The diagnostician, in his effort

to blame a group of digestive symptoms upon the appendix, has all too frequently urged the roentgenologist to find roentgen-ray evidence to substantiate the diagnosis. The result has been that we see a number of meaningless reports such as "segmented appendix," "the appendix slow in emptying, and kinked," and "immobility of the appendix and adhesions about the cecum." The roentgenologist can assist greatly in the diagnosis of appendicitis if he can report the stomach, duodenum, gall bladder, and cecum normal. He may also demonstrate whether or not the definite tenderness is localized to the appendix and if the point of maximum tenderness follows the appendix when it is moved under the palpating finger.

- (1) May mimic peptic ulcer or cholecystitis.
- (2) Appendicitis and cholecystitis are frequently associated.
- (3) Do not convict on insufficient evidence.
- (4) Epigastric or umbilical pain occurs in most cases.
- (5) Local tenderness and muscle rigidity may not correspond to area of referred pain.
- (6) Hyperalgesia can be demonstrated in more than one-half the cases.
 - (a) Disease of right ureter.
 - (b) Chronic pelvic inflammation.
- (7) Consider also
 - (c) Cancer of cecum.
 - (d) Tuberculosis of cecum.
 - (e) Right inguinal hernia.
- (8) Many cases of so-called "chronic appendicitis" can be cured by treatment of the colon.

CARDIOVASCULAR DISEASE.

It not infrequently happens that pain in the abdomen produced by cardiovascular disease or, indeed, by diaphragmatic pleurisy is mistaken for intra-abdominal pathology. The most common of these is the pain in the epigastrium caused by angina pectoris or by coronary occlusion. If one will keep in mind such possibilities, an error in diagnosis may be avoided.

The patient who has angina pectoris emphasizes the fact that his "indigestion pain" is made much worse by exercise and is relieved by rest. The patient who suffers from a gall bladder attack often walks the floor, whereas the patient whose heart is affected has learned the necessity of keeping quiet. If a dose of nitroglycerin is given, one may readily distinguish between the two conditions.

In coronary occlusion, the pain is extremely severe and is accompanied by evidence of much shock. Such an attack may be mistaken for a perforated peptic ulcer, but in coronary disease the prostration is greater and the patient is very restless. In contrast to this, the ulcer patient prefers to lie absolutely quiet. Rigidity of the abdomen is very marked in perforating ulcer.

Next in importance is the right upper quadrant pressure pain resulting from an engorged liver and due to congestive heart failure or to pericardial effusion. In acute pericarditis pain referred to the abdomen is not unusual, especially in children, when an erroneous diagnosis of appendicitis may be made. Acute infarctions of the mesentery or in the spleen or kidney may occur in subacute bacterial endocarditis and produce severe abdominal pain. I have seen these cases with attacks of pain in the right lower quadrant which could hardly be distinguished from appendicitis.

GENITO-URINARY DISEASES.

Hydronephrosis, a stricture, or a stone in the right ureter frequently produce symptoms mistaken for diseases of the gastrointestinal tract.

Hydronephrosis may produce pain in the right upper quadrant, especially along the costal margin, but it may also go as low as the umbilical level. Pain is referred to these portions of the abdomen in 15 per cent of all cases of hydronephrosis. In a series of 116 patients with hydronephrosis, 44 per cent had had unnecessary abdominal operations for relief of pain. Of course, in many of these there were no urinary symptoms.

Stone in the lower right ureter and a ureteral stricture are so frequently erroneously diagnosed that Hunter once remarked that he considered a scar in the lower right quadrant a sign of value in the diagnosis of a stricture.

Pathologic conditions affecting the right kidney and ureter are often mistaken for appendicitis. Thirteen patients recently examined, the source of whose complaint was found to be in the urinary tract, had been subjected to appendectomy without relief, or had been urged to have the appendix removed.

ABDOMINAL ALLERGY.

Symptoms in 50 Cases of Abdominal Allergy.

	Per cent
(1) Pain in epigastrium.....	20
(2) Pain in right upper quadrant....	14
(3) Mid-abdominal pain	16
(4) Lower abdominal pain.....	20
(5) Ulcer type of pain.....	10
(6) Abdominal distention	32
(7) Belching	26
(8) Sour stomach	18
(9) Epigastric heaviness	28
(10) Pyrosis	14
(11) Nausea	40
(12) Vomiting	30
(13) Intestinal cramping	24
(14) Diarrhea	12
(15) Constipation	32
(16) Mucous colitis	14
(17) Fatigue	24
(18) Weakness	20
Operated upon	12

ABDOMINAL ALLERGY.

CASE REPORT.

Female, aged 23 years, gave the following history: At the age of 7 years, the patient was confined to bed frequently on account of nausea, indigestion, and ulcers in the mouth. At 15 years she had a number of attacks of severe, cramping pain, which sometimes affected the entire abdomen. Other attacks were localized in the right lower quadrant. Three years later she suffered an attack of lower abdominal pain so acute that she was unable to stand. The bladder was also affected. When she was 23 years of age she had another severe abdominal pain in the lower right quadrant, with bloating and general abdominal

soreness. She had no fever. A diagnosis of appendicitis was made and the appendix was removed. After a short while, however, all her digestive symptoms returned. Skin tests then made revealed that she was strongly positive to wheat, and since leaving off foods containing wheat, she has been entirely well.

The medical literature today is filled with case reports similar to the above. Many patients are subjected to one or more needless operations whose condition is intestinal allergy. Gastro-intestinal symptoms are more frequently caused by food allergy than is generally supposed. A large number of symptoms often attributed to indefinite cholecystitis, peptic ulcer, appendicitis, or to irritable colon have been found due to food sensitization. In children, colic, pyloro-spasm, nausea and vomiting, regurgitation, cyclic disturbances, abdominal pain, diarrhea, mucous stools, constipation, emaciation, malnutrition, fretfulness, sleeplessness, or irritability may at times be caused by allergy.

Sixty-five per cent of patients with food allergy give a positive history of some other type as well, such as hay fever, asthma, vasomotor rhinitis, urticaria, angio-neurotic edema, or eczema. Seventy-seven per cent know that certain foods have always disagreed with them.

The physician, however, cannot afford to become too enthusiastic over the possibilities of allergy and lose sight of the many atypical forms of acute appendicitis. If a fairly good history of appendicitis associated with tenderness and muscle rigidity is obtained, surgery is in order, even though the patient is sensitive to certain foods. When dealing with such a treacherous condition as appendicitis, it is better to err on the side of removal of the organ.

The problem of distinguishing between certain cases of appendicitis and abdominal allergy becomes yet more complicated when it is recalled that an acute allergic condition may produce a mild fever and a leukocytosis of 12,000 to 18,000. In the differential count, however, the eosinophiles are likely to be definitely increased.

It is of particular interest to note that

Graham, Cole, Copher, and Moore, who have made such a thorough study of diseases of the gall bladder, have mentioned the fact that intestinal allergy must be considered carefully in the differential diagnosis of cholecystitis.

Allergic conditions may simulate almost any abdominal disease, and must be kept in mind constantly by every careful clinician.

Suspect intestinal allergy when

- (1) The clinical history is very suggestive of disease, but the roentgenogram is negative.
- (2) There is a positive family history of allergic conditions.
- (3) The patient gives a history of hay fever or other allergic conditions.
- (4) The patient has atypical digestive disturbances.
- (5) The symptoms persist after the patient has been operated upon.
- (6) Abdominal symptoms are associated with migraine.
- (7) The patient gives a history of food idiosyncrasies.
- (8) Food tests produce skin reactions.

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THE TOXIN OF EXTENSIVE SUPERFICIAL BURNS.

ROBERT KAPSINOW, M. D.

LAFAYETTE, LA.

The assumption that death from a superficial burn is due to a toxin, elaborated in the burned skin circulating in the blood, has been prevalent for many years.¹ From the standpoint of the nature of this specific substance, the most diverse compounds have been suggested but each in turn discarded for lack of proof. Indeed, if the variously mentioned poisonous substances were noted, it would be found that they paralleled our increasing knowledge in the chemistry of protein disintegration. Hence the toxin advanced from the "ptomaines" to the pyridine-like bodies, guanidine salts, toxic proteins, proteoses and peptones. At the moment, histamine is accused as the lethal substance.

Robertson and Boyd² have recently stated that in the burned skin there was a toxin "which circulates in the blood, either in or absorbed by the red blood corpuscles, and which causes symptoms seen in bad superficial burns, and in some cases death." They state that "the toxic substance consists of two portions, one of which is thermostabile, diffusible and neurotoxic; the other is thermolabile, colloidal, and necrotoxic. Chemically the toxin consists of primary and secondary proteoses."

EXPERIMENTAL.

In an attempt to identify the supposed "toxin" of burned skin, the work of Robertson and Boyd was followed with certain other control experiments.³ The methods these investigators used was as follows: Young rabbits whose abdominal walls were shaved, were burned with an electric flat iron after being completely anesthetized with ether. The burned skin of an

area of 300 sq. cm. was freed from the subcutaneous tissue and fat and washed free of blood. It was then finely ground with sea-sand in a meat chopper. This mixture was then covered with normal saline and allowed to stand for twelve hours. It was then placed in a canvas bag and squeezed in a press. To the fluid obtained, four volumes of absolute alcohol were added and then the mixture was filtered. The extract was concentrated and the alcohol removed by vacuum distillation not exceeding 40° C. The fluid obtained was clear, yellow and viscid. After passing through the Berkfeld filter, it was used for inoculation. Extracts of normal skin were prepared in the same way for controls.

In the experiments of Robertson and Boyd, guinea pigs injected intraperitoneally with extracts obtained from the skin after varying intervals following the burn, showed marked toxic effects. The extracts of normal skin produced no effect. They state that "boiling the extract for 2 minutes before injecting altered the effect produced. Nervous symptoms ensued but the animals all recovered." Boiling causes the extract to rapidly lose its toxic effect. If such extracts are evaporated to dryness on the water bath and the residue redissolved in a volume of water equivalent to the original extract, such solutions are absolutely inert on injection. Hence the active agent is volatile.

EXPERIMENTS WITH NORMAL AND BURNED SKIN.

Burned Skin.—Seven guinea pigs were injected intraperitoneally with varying quantities of the extract obtained from burned skin. Within 5 minutes all but 2 animals became drowsy and fell over on their backs. The eyes rolled downwards. Occasionally twitching of the legs occurred. They all appeared at the point of death. The other two developed symptoms slowly. Within an hour they all recovered. Eight hours later, one was found dead and autopsy revealed about 10.0 c.c. of peritoneal fluid with pulmonary congestion.

Normal Skin.—Four guinea pigs were

injected intraperitoneally with extracts obtained from normal skin. These animals behaved exactly the same way as did those receiving the extracts of burned skin. One was found dead after 20 hours with pulmonary congestion.

These experiments indicated that extracts of *both* burned and normal skin produce identical symptoms when injected into guinea pigs. Numerous repetitions of these experiments conclusively demonstrated that the results were not positive, since in some instances the extract of burned skin proved non-toxic whereas that from normal skin was toxic. Again, the reverse would be found. In other instances, neither was toxic.

In view of the fact that the toxin was supposedly of protein disintegration, attempts were made to study the effect of temperature upon the quantity of toxic substance obtainable. Accordingly, extracts of burned and normal skin were prepared in which the extraction took place in the refrigerator at 10° C. as opposed to 37° C. The potency of these extracts was just as variable and uncertain at one temperature as at the other, from which it may be concluded that the degree of proteolysis of the skin is unaffected as to its toxicity.

Since this elusive toxin was considered to be volatile when heated on the water bath and inert when heated to dryness, the loss of toxicity of these potent extracts was considered as due either to the effect of heat upon the active agent or to volatilization. A toxic preparation was heated for one-half hour under a reflux condenser. The injection of this solution proved to be just as toxic as before. Hence, one must conclude that heat alone is not effective in destroying the toxicity of the extract. Heating to dryness does however remove whatever toxicity the extract may have.

The method of extraction used in these experiments and those of Robertson and

Boyd, namely, vacuum distillation at 40° C., can be traced through the literature to a period about 1840, at which time first mention was made as to the presence of a poisonous material in burned skin. Because of the arbitrary nature of the method of extraction, a toxic preparation was further distilled on the sand bath. The distillate was injected into guinea pigs and the typical so-called toxic effect was produced. The residue was inert.

A consideration of the data here presented brings one to the conclusion that the effective substance in the burned skin extracts, prepared in this manner by previous investigators, is alcohol. Intraperitoneal injections of alcohol would explain very satisfactorily the diversified results noted with extracts of burned and normal skin. A potent extract was subjected to analysis and found to contain 9.8 per cent (by volume). The physico-chemical relationship between two solutions of different boiling points, distilled in vacuo at 40° C., demonstrates that a solution of 25 per cent alcohol made up of absolute alcohol and normal saline, when concentrated to one-tenth the volume, still contains approximately 10 per cent alcohol by volume.

Control experiments with various concentrations of alcohol from 2 per cent to 15 per cent were carried out to determine the various effects when injected intraperitoneally in guinea pigs. In this connection it was desirable to discover the strength of alcohol which can be detected by the sense of smell, since in none of these skin extracts would the presence of alcohol have been suspected from the odor.

EFFECT OF DIFFERENT STRENGTHS OF ALCOHOL.

Amounts of alcohol from 2-10 c.c. of 4 per cent alcohol had no influence. The minimum effect was produced with 10 c.c. of a 10 per cent solution. No odor of alcohol was detectable. At 15 per cent reactions were rapid and severe. Alcohol produces the identical symptoms as do the skin extracts, and these results lend support to the hypothesis that the presence of alcohol in the skin extracts in over 10 per cent by volume, is the effective agent in producing toxic symptoms and even death.

CONCLUSION.

The statement that a toxin may be prepared by extracting burned skin, which may be the cause of death in extensive superficial burns, is unwarranted. In the method here described, the so-called toxin has been definitely proven to be alcohol. This error has been handed down in the literature and is obstructing a clear viewpoint to the clarification of the burn problem. The large loss of fluid from the blood to the wounded area, leading to the establishment of a blood concentration,⁴ may be so extensive as to be incompatible with life and it is to its successful management that death may be prevented.

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ALCOHOL AS A STERILIZING MEDIUM.

Several recent editorials in the New England Journal of Medicine* have discussed alcohol as an inefficient sterilizing medium. Attention is called to the fact that it is but little known or appreciated, although it is a well established fact, that alcohol is not truly a satisfactory disinfect-

ant. This fact really should be better known than it is, because of all so called antiseptic solutions and sterilizing media alcohol is probably more widely used than any other one agent. It is fairly efficient when the vegetative forms of bacteria are considered, but it has practically no bactericidal effect if these organisms are capable of becoming spores. Actually, when sterilizing solutions of alcohol were cultured in a large Boston Hospital, it was found that they were contaminated with spore forming bacilli, many of which were *B. Welchii*. Zinsser in his book on bacteriology speaks of the alcohols as being indifferent disinfectants. He states that absolute alcohol has practically no germicidal power, although diluted alcohol in the concentration of about 50 per cent is germicidal and capable of killing the vegetative forms of bacteria in from ten to fifteen minutes.

These facts should be appreciated. It is certainly an unwise procedure to attempt to sterilize with alcohol syringes that are to be used to take blood cultures, nor is it wise to depend upon sterilization with alcohol if the syringes are to be used for intravenous or intramuscular therapy. Sterilization of glass ware or instruments should be carried out by the only safe method, that is, by boiling them for several minutes.

THE YEARLY HEALTH RECORD.

The general health of the country continues to be excellent as judging from the weekly health index from the larger cities of the United States. In the last weekly report there is a mortality rate of 9.5 as against a rate of 10.7 for last year. For the first 30 weeks of 1932 the rate is 11.9 as contrasted with a rate of 12.6 for the corresponding period of the previous year, the lowest rate that had ever obtained. In New Orleans the rate is higher than that throughout the country, but in this City it is 1.4 lower than it was for this time last year. Credit must be given for this low rate to the public health measures that have been active throughout the past few

*Fallacy of Considering Alcohol an Efficient sterilizing Medium. New England Journal of Medicine, 207:39, 1932.

Further Discussion of Alcohol as a Sterilizing Agent. New England Journal of Medicine, 207:197, 1932.

years. These rates offer very definite evidence that the reasonably small appropriations that are given to the State Board of Health should never be curtailed even in a period of economic stress, but should be continuously supported. Unfortunately this has not been so throughout the country. One of the easiest forms of economy to put into effect is a reduction in the appropriation for City, County or Parish, and State health services. Complacent law-makers have in many places reduced the monies voted for health purposes. Such reductions can not be seen concretely by the laity to have much effect but actually they are the worst economies that could be effected. Definite evidence that this is so, is seen in the marked increase in the typhoid fever rate in this country as a whole, which is almost startling and certainly very depressing.

The Metropolitan Life Insurance Company in discussing the health record for May, 1932, says that in this month the death rate 8.5 per 1000 was the lowest ever recorded except for May, 1931, when the rate was 8.4. Three important causes of death have fallen markedly, tuberculosis, pneumonia, and influenza. Likewise diseases of pregnancy and childbirth are lower than ever before. Sad to relate the mortality from cancer is higher than it has ever been. There is an eight per cent increase since 1931, and nearly 17 per cent in the past two years. This increase in the cancer rate is a reflection in part upon the physicians of the country. Continuously they should be on the look out for this dreaded scourge. Another disease which might be wiped out is typhoid fever. The public health authorities have done all that can be done with general measures. The physician should urge his patients to be vaccinated against typhoid fever every few years. The Louisiana State Board of Health is urging this. If the patient is too poor to pay for a family physician,

parish health officers are preparing to give not only this prophylactic vaccine but also to vaccinate against diphtheria.

THE MEDICAL RESERVE.

Elsewhere in the Journal is published a notice of a course which will be given by the Medical Department of the United States Army for Medical Reserve Officers at the Mayo Clinic. This notice affords an opportunity to comment upon the desirability of joining the Reserve Corps. The members of this organization have certain privileges and perquisites which should be for them of great value. The above notice of the special course, while not on active duty, is an illustration. Other courses are given, while in active duty training, which affords an opportunity of learning not only medicine but military medicine as well. Yearly there are held courses in the various Corp Areas for men who wish to have the opportunity of working under active field service. These colleges are splendidly conducted and give to the reserve officer several weeks of healthful and instructive service with pay and transportation to the camp.

The young physician and the recent graduate should give thought to becoming affiliated with the Medical Reserve. Patriotism should of course be the supreme motive. By joining the reserve a man fits himself through the required training to be a defender of the country should the occasion arise. Looking at the matter, however, from a somewhat selfish point of view the War Department offers a considerable number of inducements to the prospective officer or the actual reserve officer to become attached to the Medical Reserve. All young physicians, if physically qualified, should join the reserve for a period of some years, and then should necessity arise they will be in a position to give service to their country.

HOSPITAL STAFF TRANSACTIONS

STAFF MEETING OF MISSISSIPPI STATE HOSPITAL, JACKSON, MISSISSIPPI

Abstract: Hysteria with Paralysis.—R. B. Zeller, M. D.

Patient—White male, aged 18 years, single, farmer. Admitted to the hospital August 30, 1930. Chief Complaint—Received prophylactic injection for typhoid fever on August 11, 1930, about noon. Three hours later became comatose, remaining so except for brief intervals until August 15. From August 15 to admission was unable to move any of his extremities. When lifted they would drop without resistance. Occasionally suffered from “drawing and kicking spells” during which it was all that four men could do to hold him in bed. At times patient became talkative, thought the Germans were after him, had both visual and auditory hallucinations and misidentified members of the family. Sedatives were given to control the convulsions. Past history—Unimportant. Family History—Paternal grandfather, three uncles, two second cousins and one great aunt insane. One uncle became paralyzed in the lower extremities following typhoid prophylaxis in the army. Physical Examination—Acneic eruption over face; heart and lungs normal, tonsils enlarged; blood Wasserman negative; spinal fluid normal. Urinalysis, stool examination, blood urea nitrogen and blood sugar were all normal. Blood pressure 117/79. Pupils were slightly dilated, but equal. Right knee jerk very slightly exaggerated. No atrophy present. Arms and legs both presented a flacid paralysis. Temperature, pulse and respiration normal. Mental examination revealed nothing abnormal at present except amnesia for the periods of his stages of excitement.

Diagnosis: Hysteria, this diagnosis being based upon the paralysis without other definite organic disturbance and the negative physical examination. Treatment—The patient was given tonics and assured he would quickly recover. He was told that the day after his admission he would move his extremities, the following day sit up in bed and walk on the fourth day. Very obligingly he did as he was told he would. Comment—This case is especially interesting due to the patient's strong suggestibility. His trouble was caused by the stories of his uncle's paralysis following typhoid prophylaxis. His recovery followed proper suggestions almost as promptly.

Abstract: Hysteria with Anemia.—R. B. Zeller, M. D.

Patient—White male, aged 32 years, married, farmer. Admitted to the hospital November 4, 1931. Chief Complaint—Visual and auditory

hallucinations coming on gradually over a period of about 12 months. The hallucinations are usually connected with Germans. Memory has become poor for more recent events. On November 2 he carried his gun to the woods “to hunt Germans.” He remained in the woods until his ammunition was used up when he was captured at the foot of a tree, stating, “I have one caught but no more bullets.” Personal History—Served three enlistments in the army. Was overseas nine months during the World War. Hospitalized in France for sinusitis. Family History—Essentially negative. Physical Examination—Pupils dilated; heart and lungs normal. Blood pressure 131/72. Edentulous. Left varicocele. Deep reflexes diminished but equal. All laboratory examinations negative including blood, spinal fluid, urine and feces. Mental Examination—Shows little at present except complete amnesia from Tuesday morning, November 2, to Thursday, November 4. Neither delusions nor hallucinations can be elicited. Productions are coherent and connected. Mood very slightly depressed. Memory examination reveals many blank periods for the period following the war to the present. These he tries to fill in, apparently unconscious of so doing.

Diagnosis: On the basis of the negative serology, absence of signs pointing to organic brain disease and the absence of seizures or other epileptoid manifestations, a diagnosis of hysteria was made.

Abstract: Filariasis.—R. B. Zeller, M. D.

Patient—White male, single, aged 31 years, no regular occupation. Chief Complaint—Admitted to hospital January 7, 1932, for treatment for morphine addiction. Personal History—World War veteran, but did not go overseas. Has used alcohol since the age of 20 years and morphine since 19 years of age at which time his right leg was amputated following injury. Visited New York City in 1931. Family History—One brother now living in New York City, but formerly employed in Honduras. One brother after living in Manila for three years visited patient at his home in Mississippi in December, 1930. Neither used narcotics. Physical Examination—Numerous needle scars over veins of forearms. Right leg amputated six inches below hip. Mitral stenosis present. Blood pressure 128/78. Appendectomy scar with adhesions. Left pupil reacts sluggishly; left elbow reflex exaggerated. Serology negative including spinal fluid. Routine blood smear showed presence of filariae. Comment—This case is interesting due to the accidental finding of the parasite which as yet has apparently caused

no inconvenience, although the neurological symptoms present are perhaps due to this. The origin of the infection is especially interesting. It would seem that other cases may be found later.

STAFF MEETING OF JACKSON COUNTY HOSPITAL, PASCAGOULA, MISSISSIPPI

The staff of the Jackson County Hospital held its regular meeting Thursday evening, July 14, and the following members were present: Drs. Rape, Colle, Eley, Bailey, Smith, Lockard and McIlwain.

Secretary Lander being absent, Dr. McIlwain was appointed secretary pro tem. Dr. McIlwain was appointed on the by-laws committee to serve with Drs. Lander and Lockard.

Dr. Colle read a report from Mr. Hamilton Crawford making some suggestions in standardizing the hospital which was discussed and we hope soon to meet these requirements.

S. B. McIlwain,
Secretary, Pro Tempore.

STAFF MEETING OF KING'S DAUGHTERS' HOSPITAL, GREENVILLE, MISSISSIPPI ANNUAL BUSINESS MEETING

Abstract: G. D. Stanley—Medical Economics.

The medical profession of today is profiting professionally by the efforts of your predecessors, but you are paying dearly financially for their slack business methods and the general impression they allowed to become prevalent among their patients that the doctor's was the last bill to be paid. Regardless of how much this common attitude of the public may irritate the doctor at this time, he is doing practically nothing to change the minds of the public in their attitude towards his accounts. You may resent this statement and say that you are doing everything possible to stimulate collections but, unless you are handling **your accounts on a business basis** and are refusing to be at the beck and call of patients owing you past due accounts you are merely kidding yourselves and your outstanding accounts are increasing every month. You have the same privilege of refusing future credit to patients owing past due accounts that a commercial business has, and until you realize this fact, you are going to spend a large part of your time and ability caring for patients who have no intention of paying **you until they are forced to do so.**

In your profession, just as in any business, your collections are governed almost entirely by your attitude towards them. When I say "your attitude" I mean the attitude of the doctor or doctors themselves and not merely the attitude of your bookkeeper or your collector. Collecting at its best is a thankless and disagreeable job with the full co-operation of every member of an organization, but without this co-operation it is

hopeless. There is no perfect collection system and it is impossible to attempt to install one. However, good collection systems are possible and are in operation, to the benefit and profit of nearly every commercial business now in existence. If they are feasible in commercial business, why not in your professional business? Your answer is that our business is different. Every business is different so that instead of being your reason, this is your excuse. You will probably say because of your charity cases and the many patients of moderate means that you cannot conduct your affairs strictly along business lines. In my opinion, these are not the patients who constitute the greater part of your past due outstanding accounts and are not the ones who are imposing upon you by their failure to pay promptly, or to pay at all.

I believe your burden of past due accounts is composed of those whom you considered perfectly good when the account was made but through friendship or because of their standing in the community, you failed to request prompt payment and the accounts now are so large or so far past due that the collection of all or any part of the account is practically hopeless.

The time to collect money is when conditions are good, but there is a tendency on the part of everyone to neglect to do so with their patients or customers. I really feel that you are doing your patients a great injustice to allow their accounts to run indefinitely during good times when they can, without any great effort or hardship on their part, pay in full each month. Please remember that accounts considered in normal times to be perfectly safe and collectible, depreciate over 75 per cent during the existing conditions. You cannot expect to ignore the collection of these accounts when the patient has money and then expect to collect it during a depression, after you have allowed and encouraged him to spend it foolishly or to pay someone else, just because you did not require him to pay on your terms. If you collect closely when money is free and easy, that money won't be on your books when conditions change. If your terms are not abused during an era of prosperity, you will be able to create a surplus to help you through a depression. Your best collection argument is not that you need the money, but that it is due on your terms.

You will probably say that I have diagnosed your trouble but that I have offered no suggestion, whatever, to aid you in solving it. My first suggestion is that you establish definite terms for everyone and enforce them frankly, advising your patients of your attitude. Very few patients resent making the business arrangements provided they are told at the proper time and are kept fully advised of the amount of your charge and when you expect to be paid. It is an injustice

to them not to arrive at a definite understanding with them regarding this particular part of your business as it is something they are entitled to know and it is not good business on your part to handle your affairs in any other way.

It is much easier for a doctor practicing alone to conduct his affairs on a definite business basis than for a partnership to do so. The individual doctor sees every patient himself and is, therefore, more closely in touch with his clientele and his business than anyone in a partnership or clinic can possibly be. He is responsible only to himself and he sinks or swims on his own efforts. In an organized clinic it is different, and complete co-operation by every member is vitally important to the success of any plan or system installed. If your business is such that it is necessary to employ a bookkeeper or a business manager and, if you intend to hold him responsible for this part of your business, you must cooperate with and sustain him in his efforts to enforce your terms and policies. If you have pet accounts whom you are afraid he will offend, don't put them on your books; they are not going to be paid anyway. No one is too important to be dunned if he owes you and if you feel that he is, charge his account to advertising expense. That is where it really belongs.

You may feel that a definite collection policy may cause your patients to go to another doctor for medical attention. This may be true in a small way, but 99 per cent of those who leave you for this reason have never had any intention of paying you, so you have really lost nothing. Don't be so unselfish that you want to do all the free work in the community; let the other fellow get stuck occasionally. It will draw you closer together and your greatest benefits are received from close contact with your competitors because your problems are the same. Exercise your constitutional rights of conducting your business as you think best instead of being influenced by the fear of adverse criticism from some of your non-paying patients.

Abstract: Dr. A. S. Payne.

It is a great pity that physicians have to make a living out of the practice of medicine. How nice it would be for them to be philanthropists, that is have plenty of money to administer to rich and poor alike and expect no remuneration whatever. Physicians are the most philanthropic of all people in that they have to do so much for the indigent ill and injured. There is only one type of medical specialty that is paid for preventing disease and that is the specialty of public health and preventive medicine. In former days the general practitioner was the only one trying to prevent disease and in doing so he was working

against his own interests but that did not deter him.

We can plan wisely or none too well only to see our plans go awry. Aims and ambitions are defeated and we are confronted with new and unexpected problems. A business is built up through the years of normal operations and suddenly the economic structure must be readjusted to meet changed conditions or it fails. Our condition is greatly of our own making for lack of business principles and having no organization as do the bankers, merchants and other business men. We owe a duty to one another just as other businesses and should have an organization to guide us in normal times and to enable us to survive and to render service during depression, both local and general.

Our duty to our patients should be complete service, insofar as determining the causative factor and the true condition of the patient. This service should be rendered to all patients, rich and poor alike. It is a different matter, however, when it comes to taking care of the patient after a diagnosis is properly made. We owe a duty to ourselves and families to make a livelihood out of our work and to put aside something for the time when we are unable to work because of illness or advancing years. In this we must rely upon the Golden Rule or else we fail.

Our relations to the hospitals should be of the gravest concern because hospitals in this country are seldom endowed and have to be maintained by pay patients or charitable organizations must provide for their maintenance. The hospitals cannot bear the same relations to the doctors that the doctors bear to the hospitals but we sometimes forget that the hospitals cannot be run without the doctors. What we should expect from every pay patient is value received for services rendered according to their ability to pay and the sooner such services are paid for after being rendered, the better for all concerned.

Some years ago I felt that I had to have a great deal of work on my books to enable me to collect enough money to maintain myself and my office. This was largely a fact but during recent years a large amount of uncollectible bills is veritably not an asset but a liability. During the past the man who did a large amount of work or sold the most goods was the big man in business, but for some time past the collecting end of the business has been and still is, the main factor. A large per cent of the work collected for by doctors is not affected by the amount of the charges nor by the mode used in collecting. In my opinion, the majority of patients intend to pay the physician just as they do any other bill but it is the minority that causes us so much trouble and expense.

People of all classes are putting off calling the doctor at this time and any surgery that can possibly be postponed is left undone, while our expenses for help, rent and upkeep are on a parity with those of normal times. Our earning capacity is around fifty per cent of normal and our securities are shrinking daily so that we are like the frog who has gotten on his back and will swell up and die unless someone turns him over. General surgeons are harder hit in this respect than any other class of physicians as there is so much emergency work that must be done regardless of any ability to pay, while eye, ear, nose and throat men, gynecologists, orthopedists and other specialists can elect their time or even refuse to do work when there is no remuneration in sight.

We do not need a credit bureau to help us in our dilemma, we must render service to all who apply and depend upon their ability and willingness to pay regardless of what a credit bureau might reveal as to their promptness or willingness to meet their obligations. But we should, in my opinion, have some bureau of information among ourselves that would give us a check-up upon people who are able to pay but are so slow about doing so that their accounts are not worthwhile.

Our chances should be as nearly uniform as possible so that there will not be criticism among the laity and dissatisfaction among the physicians.

Sometime ago. I have been informed, the Scott and Bowie Clinic, at that time the best known clinic in the Southwest, was almost bankrupt. One year before Dr. Bowie died he was given the information that he had only a short time to live. He gave up the active practice of surgery and gave his attention to the business end of the clinic and thus put the business on a firm, sound basis and left his wife and children a competency. What was achieved by that man during the last year of his life should be an example and a guide to all practicing physicians.

The frog that was put in the pail of milk jumped and jumped until he churned butter out of the milk and made himself an object on which to sit and thus was able to jump out of the pail. It is to be hoped that we will get something out of this meeting that will help each one of us out of a bad financial situation in which we have been for some time.

GREENWOOD-LEFLORE HOSPITAL, GREENWOOD, MISSISSIPPI

At the regular monthly meeting of the staff of the Greenwood-Leflore Hospital, Greenwood, on July 13, the following cases were reported:

1. Hydatidiform Mole, Aborted at Fifth Month.—Dr. W. B. Dickins.

2. Embolus Following Appendectomy.—Dr. L. B. Otkin.

3. Cholecystectomy.—Dr. R. B. Yates.

Dr. F. M. Sandifer is president and Dr. W. E. Denman is secretary of the staff.

W. B. Dickins.

Greenwood,

August 4, 1932.

STAFF MEETING OF KING'S DAUGHTERS' HOSPITAL, BROOKHAVEN, MISSISSIPPI

The regular monthly meeting of the staff of the King's Daughters' Hospital was held Tuesday evening, August 2, 1932. At this meeting Dr. W. P. Tucker, a graduate of the University of Tennessee in 1930, was formally admitted to the staff. Dr. M. E. Arrington, a graduate of Tulane University, class of 1931, made application for admission to the staff.

The meeting was now turned over to the scientific program which was as follows:

Dr. O. N. Arrington discussed a case of undetermined etiology. Patient—White female, aged 16 years, became acutely ill with pain in the epigastrium, temperature 102°F., pulse 100. On the third day patient developed a typical right sided pleurisy. For nine days patient complained of very severe pain over the gall bladder region. This patient has had a marked diarrhea associated with the rest of her pathology. On the eleventh day patient was in such a condition as to indicate the necessity of rib resection. This was accordingly done and 600 c.c. of colonic pus removed from the pleural cavity. The patient is still in the hospital with free drainage and high temperature. Opinion as to the diagnosis of an amebic abscess ruptured into the pleural cavity. Case widely discussed by the entire staff.

Dr. F. E. Collins well presented a thesis on arthritis laying particular attention to arthritis of the dorsal spine with the etiological factor the prostate. Dr. Collins brought out in his discussion the history of five cases all of which denied history of gonorrhea. All had a marked dorsal spinal arthritis which he was positive was due to prostatic disease. This paper was fully discussed.

After serving of refreshments the meeting adjourned until the first Tuesday in September.

R. A. Savage, Secretary.

Brookhaven,

August 8, 1932.

STAFF MEETING OF THE VICKSBURG SANITARIUM, VICKSBURG, MISSISSIPPI

The regular monthly meeting of the staff of the Vicksburg Sanitarium and Crawford Street Hospital was held on August 10, at 6:30 p. m., with eleven members of the staff and three visitors present.

After reports from the Records Department and Analysis of the Work of the Hospital, the following case reports were presented:

1. Exophthalmic Goitre.—Dr. G. M. Street.
2. Acute Intestinal Obstruction; Primary Resection of Section of Small Intestine.—Dr. A. Street.
3. Gunshot Wound with Compound Comminuted Fractures of Arms.—Dr. Walter E. Johnston.

Special Reports:

1. From the Warren County Health Department.—Dr. F. M. Smith, Director.
2. Uremia.—Dr. L. J. Clark.

Selected radiographic studies were demonstrated as follows: Epiphyseal separation of lower end of humerus; pulmonary tuberculosis; (2 cases); suppurative pleurisy; pulmonary abscess; aneurism of aorta; ureteral calculus; gastric ulcer.

The meeting closed with a lunch.

The next meeting of the staff will be held on Saturday, September 10, at 6:30 p. m.

Abstract: Gunshot Wound with Compound Comminuted Fractures of Arms.—Dr. Walter E. Johnston.

A colored male was admitted to the hospital on April 2, 1932, with the following history. He had been at work firing a locomotive and as he scooped up some coal, an automobile drove up beside the cab and an unknown party fired at him, the coal scoop dropped from his hands and he jumped from the cab to seek protection.

On admission to the hospital an immediate examination revealed a very frightened negro man. His clothing was covered with blood. It was not difficult to see that both humeri were fractured, there were several buckshot wounds in each arm. There were several superficial wounds

of the abdomen. The examination otherwise was negative.

An immediate examination confirmed the diagnosis of fractures of both humeri. The left appeared to be a longitudinal fracture toward the middle of the shaft while the right revealed a shattered mass of bone in the distal portion partly involving the joint. Several buckshot were seen in both arms.

The pulse in the left radial was palpable, the volume being fair. The pulse in the right could be elicited only with the greatest difficulty. The question of amputation arose but it was finally decided to wait a few hours and give the arm a chance. Light splints were applied and the patient sent to the ward where the arms were placed in abduction and local heat applied. No effort had been made to reduce the fracture or to remove the shot.

The following morning the patient was resting well and the pulse was much stronger in both arms. There was no evidence of nerve injury.

For the next two weeks he was kept quietly in bed, all efforts being centered on the restoration of the circulation and the treatment of the wounds. At the end of this time fair progress had been made in both directions.

The reduction of the fracture was the next thing to consider. The question arose as to the type of traction. It was thought that the same type should be used in both arms. Ankylosis seemed certain. Skeletal traction was the type selected, so on April 18, steel pins were drilled through the olecranon processes of both ulnae. A small home-made iron frame was attached to the pin on each side, and extension was made on these frames, about ten pounds on each side.

One of the interesting points was the fact that the patient stated that there was very little pain in the sites of the pins and that just as soon as the weights were attached, there was less pain in each arm at the sites of the fractures. Another interesting point was that he was able to move the forearms to a great extent with practically no discomfort. This he was instructed to do as much as possible.

The progress was so favorable that on May 11 the pin was removed from the left arm and on May 21 from the right arm. Due to the continuous traction on the right side there was a slight separation of the elbow joint but this was corrected in several days by extreme flexion. Light coaptation splints were applied to each arm for several weeks; the forearms being allowed to move freely.

The patient was last seen on August 10, at which time he was able to flex and extend both arms about as well as he ever could. He states

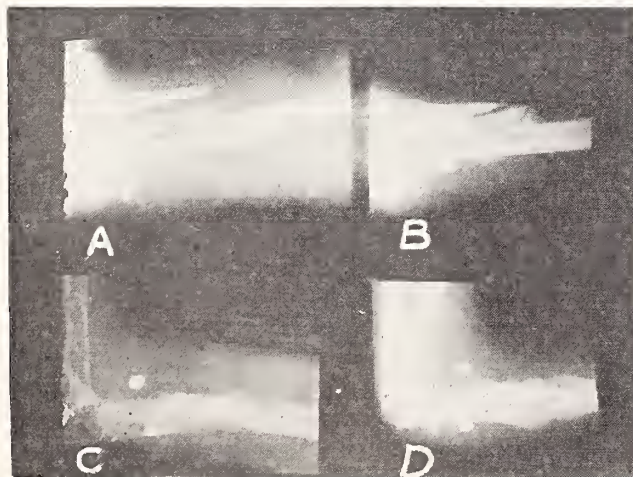


Fig. 1.—A and C—Antero-posterior and lateral views of right arm, several days after skeletal traction had been applied. B and D—Same arm 12 weeks after accident.

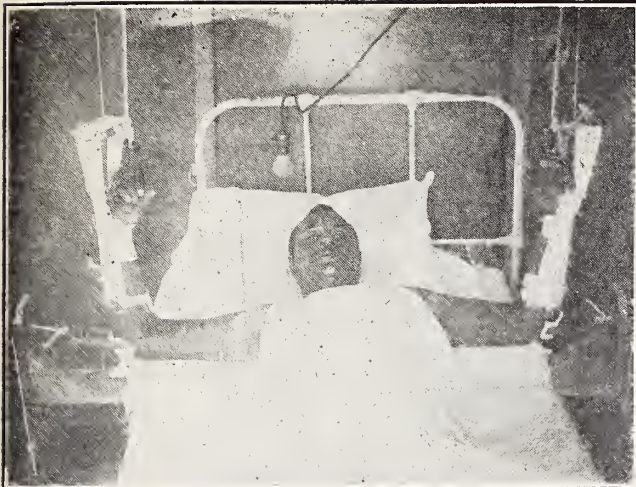


Fig. 2.—Method used in treatment of compound fractures of both humeri. Patient remained in this position for six weeks.

that he can shave with the right arm and every day he cuts wood with an axe.

In conclusion this case illustrates several interesting facts: First, conservative surgery frequently prevents an amputation; Second, properly placed skeletal traction allowing mobility of joints often saves the injured member, restoring to the individual a means of livelihood.

Abstract: Acute Intestinal Obstruction; Primary Resection of Involved Small Intestine.—Dr. A. Street.

Patient—White male, aged 17 years, admitted to Vicksburg Sanitarium on June 21, 1932. **Chief Complaint**—Abdominal pain. Onset three days before admission as intermittent pain in the left lower quadrant of abdomen. Since then the pain has become more severe and is now most marked in the right lower quadrant. The abdomen has become enlarged and tight. There has been vomiting. The bowels have moved each day. **Previous and family history**—Not remarkable. **Physical Examination**—Well developed and well nourished; appears acutely ill. Temperature 100°F.; blood pressure 100/65. Abdomen moderately tympanitic; no rigidity; definite low ab-

dominal tenderness, more marked on the right. The physical examination was not otherwise remarkable. Urinalysis showed nothing abnormal. Blood count showed leukocytes 20,300; polymorphonuclear neutrophils 95 per cent, polymorphonuclear eosinophils 4 per cent, polymorphonuclear basophils 1 per cent. The pre-operative diagnosis was acute appendicitis.

Operation—Performed immediately; spinal anaesthesia 150 milligrams of novocain; McBurney incision. All visible peritoneal surface showed acute congestion. There was much free, slightly turbid, straw colored peritoneal fluid. The appendix showed no more evidence of an inflammatory process than did the other abdominal contents. The terminal ileum showed no diverticulum. The operator's hand was introduced into the abdomen and the cavity explored by palpation. Nothing abnormal was made out in the pelvis, the right side of the abdomen, nor in the gall bladder region. Finally, a rather distended loop of small intestine was located well to the left of the umbilicus. On drawing this intestine toward the incision (McBurney), a peritoneal band which was drawn across a portion close to it snapped, and released a segment five inches in length which appeared gangrenous. There was a line around the intestine at each end of this segment where the band had compressed itself deeply into the wall. Resection was done, dividing the intestine five inches from the involved tissue on each side of it. The ends were inverted and lateral anastomosis done.

Convalescence was entirely uneventful; the temperature was normal on the fourth day after operation; the wound healed by primary union; and the patient was discharged, cured, on his fourteenth day.

Surgical Pathology by Dr. Lippincott.—Segment of jejunum, 16½ inches in length by 1 to 1¾ inches in diameter. Middle five inches gray, injected, and the surface rough. Wall thickened.

Microscopic—Acute purulent inflammatory; much interstitial blood and fibrin, most marked submucous, in circular muscle and subserous. Large hematoma in circular muscle extending into submucosa one area. Considerable passive congestion.

LOUISIANA STATE MEDICAL SOCIETY NEWS

EAST AND WEST FELICIANA BI-PARISH MEDICAL SOCIETY

The Bi-Parish Medical Society met with Dr. Glenn J. Smith and staff in the East Louisiana State Hospital at Jackson. Dr. J. B. Stanley read an instructive and interesting paper on Backache from a Neurological Viewpoint. Physicians present were Drs. Stanley, Miller, Turner, McConnell, Robards, Lea, Smith, Weiss, Williams, Farragut, E. M. and C. S. Toler, and Internes of Hospital; also several ladies and Rev. Nelson.

D. L. Shaw, President.

E. M. Toler, Secretary.

THE TUMOR DEPARTMENT OF THE SHREVEPORT CHARITY HOSPITAL

Additional information concerning the new Tumor Clinic Department of the Shreveport Charity Hospital, which was recently opened, has come to hand. The unit which is said to be unexcelled in the South, is equipped with a modern Valve Tube 280,000 volts, 30 milliamperes deep therapy machine and a shock proof superficial therapy treatment stand. One hundred and fifty milligrams of radium, distributed in fifty-three platinum and monel needles with accessories, a modern radium work bench with protective booth and a modification of Holfelder's field selector for the charting of patients for deep therapy, and a complete clinical photographic department, all go to make it the equal of any clinic. Two special pavillions have been provided for housing of the patients.

Dr. E. L. Sanderson, superintendent of the hospital, is director and surgeon of the group; Dr. O. C. Rigby, gynecologist; Dr. I. B. Rougon, urologist; Dr. W. S. Kerlin, medicine; Dr. Guy A. Caldwell, orthopedist; Dr. P. R. Gilmer, chest; Dr. Dean Duncan, neurologist; Dr. J. E. Woolworth, eye; Dr. L. W. Gorton, nose and throat; Dr. C. B. Erickson, dermatologist; Dr. J. R. Matthews, pathologist, and Dr. Harold G. F. Edwards, radiologist, complete the group.

RIVERSIDE SANITARIUM REOPENS

Miss Nobie May Smith, a graduate nurse of many years training and experience assumes charge of the Riverside Sanitarium, reopened August 1.

Professional staff organization was effected through a unique but simple and thoroughly democratic method by the Professional Fraternity—the chiefs of the several departments being selected in recognition of their scientific professional attainments and integrity. The courtesies of the institution, under the direction of Miss Smith are open to patients of all ethical physicians, to meet the requirements of the American

Hospital Association and the American College of Surgeons. The reorganization Professional Staff as outlined above is composed of the following: Chief of Staff, C. P. Gray, M. D.; vice chief of staff, A. G. McHenry, M. D.; chief of surgical section, J. E. Walsworth, M. D.; vice chief of surgical section, J. Q. Graves, M. D.; chief of medical section, M. W. Hunter, M. D.; vice chief of medical section, E. J. Young, M. D.; chief of obstetrical section, J. T. French, M. D.; chief of gynecological section, J. H. Pankey, M. D.; chief of orthopedic section, Geo. W. Wright, M. D.; chief of eye, ear, nose and throat, A. L. Peters, M. D.; chief of pediatrics, E. R. Yancy, M. D.; chief of genito urinary section, J. W. Murphy, M. D.; chief of record department, I. J. Wolf, M. D.; X-ray and chemical laboratory, F. T. Dean, A. B.; proctological department, C. H. Hill, M. D.

COURSE AT MAYO CLINIC FOR M. R. C. OFFICERS

The medico-military course of inactive duty training for Medical Department Reserve officers, which has been held at the Mayo Clinic during the past three years, will again be held this year from October 16 to 29, both dates inclusive. This inactive duty training will follow the plan so well worked out under the auspices of Colonel George A. Skinner and the military features will be under his personal supervision.

This medico-military course is based on the sound principle that when the Reserve officer gives up two weeks of his time for inactive duty training at his own expense he should derive some benefit therefrom which will definitely help him in his profession. This method of training takes cognizance in a high degree of this principle in that the student officer gets two weeks of excellent clinical post-graduate work without fee and without any greater loss of time from his practice than normally is incurred for post-graduate work, along professional lines. At the same time he gets a definite amount of medico-military training, the benefits of which he retains.

In furtherance of this concept, the Mayo Clinic has freely placed all of its clinical material, laboratory, museum, library, and so forth at the disposal of the Medical Department Reserve officers taking this inactive duty training. The faculty and staff of the Mayo Clinic have volunteered to give their services free in the interests of national defense.

This short course is equally applicable to general practitioners and specialists. The morning hours are devoted to purely professional subjects selected by the student officers. The afternoon hours pertain solely to medico-military subjects

and the evening hours are covered in a lyceum course of general interest.

Application for this course of inactive duty training should be made either to the Director of the Mayo Foundation, Rochester, Minnesota, or to the Corps Area Surgeon, Seventh Corps Area, Omaha, Nebraska. Applications should state the character of the work the candidate desires to follow in the morning hours. All student officers are expected to attend and to participate in the afternoon and evening sessions. Each applicant should fully understand that the invitation to accept this course of study without charge is extended by the Mayo Clinic; that the project is without expense to the government; and that two hundred hours' credit will be given to those who take and complete the course.

NEWS ITEMS

On August 2, 1932, Prof. Charles J. Bloom of the faculty of the Graduate School of Medicine of The Tulane University of Louisiana, addressed the Calhoun County Medical Society at Anniston, Ala., on "Various Phases of Rickets." On August 4, 5 and 6, Prof. Bloom participated in the teaching activities of the Southern Pediatric Seminar at Saluda, N. C.

OKLAHOMA CITY CLINICAL SOCIETY.

The third annual fall clinical conference of the Oklahoma City Clinical Society will be held in Oklahoma City October 31, November 1, 2 and 3 with 21 distinguished leaders in the medical and surgical fields as guest lecturers, according to Dr. Henry H. Turner, director of clinics.

The program, which will include daily general assemblies, 100 hours of post graduate work, two night symposia, daily round table luncheon conferences, scientific and commercial exhibits and an elaborate schedule of entertainment, has been arranged so there will be no confusion among registrants desiring to attend particular courses.

The annual clinic dinner, with Dr. E. H. Cary, Dallas, Texas, president of the American Medical Association, as speaker, will be held the second night of the conference. Symposia will be held the first and third nights on "Urology." Dr. E. G. Brackett, Boston, and Dr. Henry H. Kessler, Newark, N. J., will conduct the symposium on "Industrial Surgery."

INFECTIOUS DISEASES IN LOUISIANA

Dr. J. A. O'Hara, president of the Louisiana State Board of Health, in collaboration with the Treasury Department of the United States Public Health Service, has issued mortality weekly reports which briefly abstracted contain the following information. For the week ending July 23, the twenty-ninth week of the year, there was a quite considerable increase in the number of

typhoid fever cases reported throughout the State, there being 74, 27 of which were reported from Orleans Parish, most of which were imported. The rest of the cases were scattered widely throughout the State. The other diseases reported in double figures include 67 cases of syphilis, 32 of malaria, 28 of pneumonia, 27 of tuberculosis, 13 each of gonorrhea and cancer. For the thirtieth week of the year the typhoid fever cases had fallen somewhat, there being 68 cases reported. Twelve of these cases were reported from Natchitoches Parish, 9 from DeSoto, 7 from Orleans, 8 from Caddo, and 6 from Avoyelles. There were also reported during this week 52 cases of pulmonary tuberculosis, 32 of syphilis, 31 of measles, 24 of malaria, 14 of pneumonia, 13 of diphtheria. Three cases of undulant fever were also reported, one of typhus, and 3 of para-typhoid. For the next week ending August 6, there was a great drop in the incidence of typhoid fever, only 27 cases being reported, 7 of which came from Caddo Parish, and not more than 3 from any other one parish. Other diseases reported in double numbers were: 63 cases of syphilis, 34 of pulmonary tuberculosis, 33 of malaria, 44 of gonorrhea, 15 of diphtheria, 11 of pneumonia, and 10 of cancer. Of the rarer diseases one case of undulant fever was reported from Lafayette Parish. In the same parish one case of poliomyelitis was reported, as well as one case in Orleans Parish, and a case of smallpox from East Feliciana, and a typhus fever case from Orleans Parish. For the thirty-second week of the year which ended August 13, the two venereal diseases led all the other reportable diseases except typhoid fever, 31 cases of the latter being reported from the parishes throughout the State, Rapides Parish having the most of these, namely 8 cases. Other diseases that were reported in double figures included 29 cases of pulmonary tuberculosis, 21 of malaria, 20 of pneumonia, 17 of diphtheria, 14 of cancer, 11 of measles, and 10 of influenza. Of the unusual diseases smallpox was reported in two instances, undulant fever in one, and 3 cases of poliomyelitis were reported from Orleans Parish.

HEALTH OF NEW ORLEANS

The Department of Commerce, Division of Vital Statistics, has issued the following weekly reports concerning the health of New Orleans. For the week ending July 16, 1932, a week incidentally in which there was an unprecedented heat spell, there occurred in the City of New Orleans 210 deaths, with the highest death rate namely 23.1, obtained for a long while. The total deaths were made up of 137 white and 73 colored individuals, giving a death rate for the former of 21.2 and the latter 27.8. A not inconsider-

able number of infants under one year of age died during this period, giving an infant mortality rate of 125, whereas the average rate is only 88. The following week ending July 23 saw a reduction in the total number of deaths, these falling to 179, giving a death rate of 19.7. In this week there were 109 deaths in the white population and 70 in the colored, the death rate of the former being 16.9 and the latter 26.6. The infant mortality rate fell to 91. For the week ending July 30, the death total had fallen to 135, almost 50 per cent smaller than the two weeks preceding. This gave a death rate of 14.9, with 83 white deaths and 52 colored, the death rate for the whites being 12.9 and for the colored population 19.8. The infant mortality rate was 80. For the week ending August 6 the rate was still decreasing, being 13.9 as a result of 126 deaths in the City this week, 70 of which were among the white and 56 in the colored population. The death rate for the former was 10.9 and for the latter 21.3, with an infant mortality rate of only 45, just about half of the average rate.

DEATHS

Thomas, Alva G., Salt Lake City: Born in 1890. Graduated from the Indiana University in 1917. He was a member of the Orleans Parish Medical Society and the Louisiana State Medical Society until his removal to Salt Lake City in June, 1931. He specialized in eye, ear, nose and throat. Died in Salt Lake City on July 21, 1932.

Worley, P. C., Shreveport, La.: Born in 1873. Graduated from the Memphis Hospital Medical College in 1899. He was a member of the Shreveport Medical Society and the Louisiana State Medical Society. He died in Shreveport on July 21, 1932.

Kilgore, John Duke, Minden, La.: Born 1883, Claiborne Parish, Louisiana. Studied medicine and finished as M. D. at Memphis Hospital Medical College in 1910. He served as an interne in Marine Hospital of Memphis, Tennessee, and began the practice of medicine in Webster Parish, Louisiana, where he has been an active physician and surgeon for the past twenty-two years. He was a member of the Webster Parish Medical Society and Louisiana State Medical Society. Post graduate work was pursued at New Orleans Polyclinic, Dallas Polyclinic and New York Polyclinic. He served as president of the Webster Parish

Board of Health for a number of years. He was treasurer and stockholder in the Minden Sanitarium at the time of his death. He was one of the Minden physicians who devoted much time and effort in erecting the Minden Sanitarium which has been a valuable asset to the city of Minden and Webster Parish. Died in the Minden Sanitarium, July 27, 1932, as a result of internal injuries received in an automobile accident while returning from a call on the Lewisville Highway, July 4, 1932. He is survived by his widow, mother and six brothers.

RESOLUTIONS ON THE DEATH OF DR. KILGORE

"That death rides upon every passing breeze" was all too true of our lamented friend and fellow practitioner, Dr. J. D. Kilgore. In the very prime of life and full health in the discharge of his daily duties, he had a car accident about three weeks ago that resulted in his unexpected death. The passing of that patient man and useful doctor was a distinct blow to the entire community, and he will be greatly missed by all as he was wont to travel over hills and up and down the valleys of this country on his missions of helpfulness and service.

Dr. Kilgore loved his profession, and was ambitious to render the greatest service possible to those who might call upon him. In his conduct with men he was always fair, leaning to the side of the weak and helpless. He was a regular attendant of our Parish Medical Society and always took an active part in its deliberations. His relations with his associates in medicine were thoughtful and considerate, avoiding, if possible, anything that might give pain or offense. Therefore

Be it Resolved, The medical profession of Webster Parish bows its head in sadness and sorrow at the untimely taking of our faithful friend and fellow practitioner, Dr. J. D. Kilgore;

Resolved, further, we should strive to emulate his many good qualities, that added so much to his successful medical career;

Resolved, still further, that we ask our home papers to publish these notations, and send copies to his family and relatives.

Luther Longino, M. D.
Wilkins McDade, M. D.
W. Carroll Summer, M. D.

MISSISSIPPI STATE MEDICAL ASSOCIATION NEWS

L. S. Lippincott, Editor

Jacob S. Ullman, Associate Editor

D. W. Jones, Associate Editor

THAT WE MAY KNOW EACH OTHER BETTER

Dr. Dan'l. J. Williams was born in Lawrence County, Mississippi, August 16, 1868. He attended the Public Schools and worked on the farm until sixteen years of age, when he entered Mississippi College where he finished the junior course. He then began to study medicine and graduated from Tulane University in the Class of 1890. He began the practice of medicine in the spring of the same year at Moss Point, Miss., was appointed quarantine officer at Ship Island in 1891, and at the close of the quarantine season, moved to Chicora. Not being satisfied with contract work, he moved to Ellisville where he had a large and lucrative practice until he moved to Gulfport in 1912.

Dr. Williams has for a number of years been an active worker in county and state medical organizations and public health. He organized the Jones County Medical Society in 1893 and since that time he has missed but one regular monthly medical society meeting. Few have been more active than he in their efforts to promote the interest and general welfare of the medical profession as well as of the state. He was elected a member of the Council when it was created in 1903 and served continuously until 1911, the year of his election without opposition to the presidency of the State Medical Association. He was Secretary of the Council in 1907 and chair-

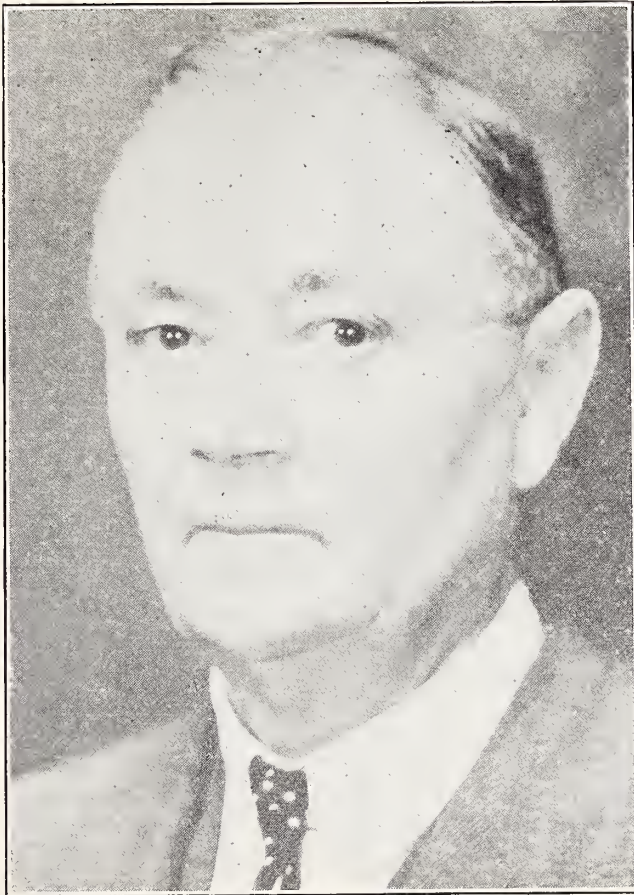
man of the Council in 1908, 1909, 1910 and 1911. He was again elected a member of the Council in 1917 and has served continuously as its chairman since 1921. In 1907 he was chosen as a

member of the Mississippi State Board of Health as one of the five representatives of the Mississippi State Medical Ass'n and was a member of the executive committee. He was appointed as a committee of one and contracted with Dr. Fred J. Mayer, now past president of the Louisiana State Medical Society, to put on the first state-wide public health campaign in the United States. In this work, he was assisted by three now past presidents of the Mississippi State Medical Association, namely Drs. T. E. Ross of Hattiesburg, G. F. Bryan of Amory and John Darrington of Yazoo City.

He has served on several important committees, among them with Doctors W. S. Leathers and H. F. Garrison to work out a plan for establishing and operating the State Tuberculosis Sanatori-

um at Magee.

He was one of the vice presidents of the Southern Medical Association in 1912—and a delegate to the American Medical Association for several years. During his residence in Ellisville, he was city health officer and after moving to Gulfport, he was appointed county health officer for Harrison County in 1915—this office was made full time in 1917. Dr. Williams has served con-



DR. DANIEL J. WILLIAMS

Chairman of Council, Mississippi State Medical Association, Gulfport, Mississippi.

tinuously as director of this unit which is the oldest county unit in the United States in continuous service.

On November 30, 1918, Dr. Williams was married to Miss Maude L. Hepler of Winfield, Kansas, who ably assists him in his work.

LET'S HAVE YOUR VIEWS.

There are numerous medical and hospital problems that must be settled. Some must be settled soon. In order that changes may be fair to the greatest number, such problems should have the careful thought of our best minds. Understanding discussion is always good. Let's have your views.

We hear that Mississippi should have more community hospitals and that community hospitals will not meet our needs. We hear that the charity hospitals of the state under the present system are not satisfactory and that they are doing a wonderful work. We hear that if our charity institutions could be taken out of politics and made teaching institutions of the highest type, that they would be a great asset to medical practice. We hear that our charity hospitals cost too much money as it is and that they cannot be improved. We hear that there are too many schools of nursing in Mississippi, that no hospital with less than a daily average of 35 patients is suitable for training nurses, that there are too many graduate nurses already, that the curriculum of the nurses' training courses is becoming top heavy with laboratory and special requirements to the detriment of practical experience in the actual care of the sick, that hospitals should not use student nurses on special duty, that student nurses should be relieved of duties other than actual nursing, that they should have fewer hours of duty, that they should have better quarters. We hear that hospitals are losing large sums of money in caring for patients injured in automobile accidents. We hear that group practice is taking work from the family doctor.

These and many others are real problems. Let's discuss them and then let's settle them in the right way.

MEDICAL ECONOMICS.

We all have to be interested in the economics of the practice of medicine. Until recently, however, most of us placed that phase of our work last or ignored it altogether. While sufficient money was coming in without much effort, we did not push our collections, thinking, if we thought at all, that most patients would eventually pay for services rendered. Financial conditions of recent months have taught us that we must change our methods and the effect is good. As

improvement comes, as it is already coming, we should remember the lesson that business methods can be applied to medicine. We shall do no less for those honestly unable to pay and shall be glad as before to do our part to lessen their sufferings, but we shall also expect those who can pay to consider our services worthy of compensation.

It is a good sign that doctors and hospitals are giving consideration to financial matters. The King's Daughters' Hospital of Greenville has decided to devote one staff meeting each year to medical economics. Under Hospital Staff Transactions on another page of this number of our Journal, are abstracts of discussions by Dr. A. G. Payne and Mr. G. D. Stanley of the staff of that institution. Both are worth your consideration.

Other hospital and medical groups of Mississippi could profitably follow the lead of the Greenville hospital staff.

HISTORY OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION—(Continued)

1932. The work of the Association for the year 1931-2 focussed chiefly on the Medical School of the University. This was under fire and had been placed on probation as a result of political interference with the personnel of the faculty. Energetic work had been necessary to prevent its being entirely discredited and in this work the officers and various members of the Association took an active part.

Apparently the Association kept out of politics, for although this was the year of a meeting of the legislature, there is no record of a report from the committee on Public Policy and Legislation.

Of minor moment, the year set a record in that for the first time there was a called meeting of the House of Delegates. This was necessitated by a conflict of dates with the American Medical Association, which met in New Orleans.

Much was accomplished at the 1932 meeting in the way of changes tending to efficiency in the meetings of the Association. Changes in the laws provided for the election by the House of Delegates of its own speaker and by the scientific sections of their own chairmen and a mandatory ruling was given the committee on program limiting the number of papers to be presented by guests to one in each section.

MISSISSIPPI STATE HOSPITAL ASSOCIATION.

Columbia, Mississippi,
July 20, 1932.

To the Members of the Mississippi State Hospital Association:

It has been definitely decided to hold the next

annual meeting of the Mississippi State Hospital Association in Jackson, beginning at 8:00 o'clock on the morning of May 8, 1933, which is the day preceding the convening of the Mississippi State Medical Association. This arrangement has been decided upon as affording a splendid opportunity to continue and foster the cordial relation existing between the two Associations, the benefits derived therefrom, and finally the members by going one day earlier may attend both Associations at a considerable saving of time and money. You will be advised later the exact place in Jackson where the meeting will be held.

As set out in our constitution and by-laws, the following committees are appointed by your President, and you are asked to undertake the duties as outlined below:

Committee on Community Hospitals:

Dr. V. B. Philpot, Houston, Chairman; Dr. M. L. Flynt, Newton; Dr. H. N. Mayes, New Albany; Dr. R. J. Field, Centreville; Mr. G. D. Stanley, Greenville; Miss Mary H. Trigg, R. N., Greenwood; Dr. C. A. McWilliams, Gulfport; Dr. K. T. Klein, Meridian; Miss Louise Holmes, R. N., Tupelo.

This is a very important committee and it is requested that prompt and careful consideration be given to the many factors whereby both hospitals and patients may be benefited. It is suggested that this committee cooperate with the committee of the Mississippi State Medical Association on Community Hospitals and with our own committee on Legislation.

Dr. John C. Culley, Oxford, Chairman; Dr. W. W. Crawford, Hattiesburg; Dr. L. W. Brock, McComb; Dr. Wm. W. McRae, Corinth; Dr. W. C. Brewer, Columbus; Dr. W. H. Frizell, Brookhaven; Dr. G. L. Arrington, Meridian; Dr. J. W. Anderson, Booneville.

Although it is unlikely that an extra session of our legislature will be called by Governor Conner this year, still it would be well to be prepared for any emergency by having the proper bills ready to present. Moreover, with this committee studying present conditions and working out thoughtfully the much needed legislation, more equitable bills will no doubt be prepared than have yet been presented.

A plan to care for the charity patients in our community hospitals was worked out and presented at the last meeting of the legislature by the committee on Community Hospitals of the State Medical Association cooperating with our committee from this Association. It was a well planned bill, fair to all concerned and truly a Godsend to the charity cases of the state. This bill, however, was "held up" and was not presented until 10:00 a. m. of the day the legislature adjourned. It was rearranged before presented

as S. B. No. 491; it is very unsatisfactory in many ways, entirely inadequate, but is a step in the right direction.

This committee should initiate a state-wide program setting forth the urgent need of state support for Community Hospitals to enable them to care for charity patients at home. The facts in favor of this plan are most evident to everyone who understands them. Proper state-wide publicity should be given the plan worked out by the committee setting forth the many advantages to the patient due to the close proximity of the hospital, less transportation cost, the savings of valuable time, etc. Every Senator and Representative should be contacted and talks before all the medical societies of the state should be made.

This committee is asked to cooperate with the Community Hospital Committee of the State Medical Association of which Dr. E. R. Nobles, Rose-dale, is Chairman.

Other important and even vital legislation is needed in behalf of our hospitals. First a Fraud Bill to protect us, similar to the one the hotels have. Hotels are protected for board or room or both. Why should we not have this protection when we furnish not only room and board, but nurses, doctors, drugs, dressings, laboratory, roentgen ray and everything that is needed for the patient. Some plan should be worked out requiring automobile insurance to take care of highway emergency cases. This has been an enormous burden on some of our hospitals and will continue to be so until proper legislation is enacted.

Workmen's Compensation.—A Compensation Law is coming. Our Legislative Committee should investigate laws in other states, and through a fair understanding and agreement with the State Compensation Commission see to it that the bill when presented provides, or is amended to provide for fair satisfactory working conditions between industry and hospitals.

Committee on Charity Hospitals:

Dr. B. B. Martin, Vicksburg, Chairman; Dr. Rowland Cranford, Laurel; Dr. Wm. J. Anderson, Meridian; Dr. J. A. Rayburn, Natchez; Dr. A. M. McCarthy, Electric Mills; Rev. H. Ogden, Hattiesburg; Dr. John Darrington, Yazoo City.

There is much need of a change in the government of our State Charity Hospitals. The system itself is wrong. Those important institutions should be taken out of politics and the Chief Officers-in-Charge appointed by a Board or Commission, their selection being based upon integrity, ability, special training, professional qualifications and general fitness for the position. If a well-to-do patient submits to an untrained surgeons' knife that is his own fault. But when a charity patient who has no other choice must

submit to an operation by a doctor without previous experience, no special training, or even an internship, and whose only qualifications for the position he holds is his political affiliation—then, our care for our sick and suffering is not done according to the high standards of our profession. It has been rightly said "A country may be judged by the care it gives to its poor sick."

Real men of ability appointed to these institutions would know that their appointments were permanent on good behavior so long as their work was well done and would not be a part of an oscillating political machine. Furthermore, the results achieved by competent all-time men would make our charity hospitals favorably known throughout the country and this influence would make medicine in Mississippi better.

The view point of your President is this: If the Charity Hospitals are to remain as such, they should be taken out of politics and should be included with the other community hospitals of the State and should derive their revenue from the same source. In that way they would serve their community, we would serve ours, there should be no competition, and each would be paid only for the patients treated. This committee should give this matter real study and is requested to work in conjunction with the Committee on Legislation in arranging a bill to be presented at the first opportunity.

Committee on Publicity:

Mr. W. Hamilton Crawford, Hattiesburg, Chairman; Dr. Leon S. Lippincott, Vicksburg, Dr. W. H. Anderson, Booneville.

Our Hospital Association is young, it can only grow and develop as it is cared for and nourished—proper publicity will help it to grow, will help build public opinion, and through our growth and development we will be able to accomplish our aims. To all members let me urge you to send in your news items, staff meeting reports, interesting hospital cases, suggestions for hospital executives, doctors or nurses, marriages, births, deaths, anything of interest in our hospital field. This committee should keep in touch with the work of all the committees and give their activities desirable publicity.

Committee on Minimum Standards:

Dr. W. W. Crawford, Hattiesburg, Chairman; Dr. H. R. Shands, Jackson; Dr. E. E. Benoist, Jackson; Dr. John Howell, Canton; Dr. W. A. Dearman, Gulfport.

Our association should be officially recognized as the authority on hospitals within the State. It should be accorded the same standing as regards hospitals as the Mississippi State Medical Association holds as regards medicine. To secure such recognition, it is necessary to show that we are living up to certain desirable standards. It

will be the duty of this committee to study and prepare a Minimum Standard and to present same at our next annual meeting.

Committee on Nurses and Nursing:

Dr. A. Street, Vicksburg, Chairman; Mrs. Maude Varnardo, R. N., Laurel; Mr. G. D. Stanley, Greenville; Dr. F. B. Long, Starkville; Dr. N. C. Womack, Jackson.

The authorization for the appointment of this committee was voted at our last annual meeting. The duties of this committee are to study the nursing problems of the State in relation to the hospitals, try to determine if the percentage of unemployed graduate nurses is higher than that of other professions or vocations. Much propaganda is being distributed throughout the country, mostly from New York, that there is an oversupply of nurses, stressing the need of immediate drastic action to limit the number of future graduates and suggesting this should be brought about by raising the educational requirements, special intelligence tests, tuition fees, and abolishing all training schools where the daily average of patients is less than 35. The information I have from a number of superintendents who have conducted training schools for years is that these superintendents maintain that their graduate nurses are well trained and entirely capable, that the personal instruction and care they receive in small schools is far superior to that received in wholesale production where one large training school will turn out more graduates in one class than all of our training schools in the state combined. Graduate nurses often remain in the town or community in which they graduate. They may not hold Ph. D. degrees, nevertheless, the local hospitals and family physicians prefer them just the same.

May I suggest that this committee give this problem sincere thought and careful consideration and present a plan at our next annual meeting fair to hospitals, doctors, nurses and patients. This committee should work with the Mississippi Nurses Association and agree on "A Minimum Standard Which Should Include Educational Requirements, Requirements of Training School, Curriculum Showing Subjects and Hours, Pay, Vacation, Sick Leave and Group Insurance."

Committee on Membership:

Dr. R. J. Field, Centerville, Chairman; Dr. W. C. Brewer, Columbus; Dr. Frank P. Ivy, West Point; Dr. V. B. Martin, Picayune; Dr. G. A. Brown, Water Valley.

The members of the Membership Committee shall consider all applications for membership, conscientiously determine the eligibility of each applicant and express their approval or disapproval thereof through the Secretary.

It is suggested by the President that this

committee familiarize themselves with Article III of the Constitution and By-Laws of the Mississippi State Hospital Association, a copy of which will be mailed you upon request to the Secretary. The aim of this committee should be to enlist every available member in each classification. "In unity there is strength." We can strengthen our organization by increasing the membership with desirable members.

Your President requests each Committee Chairman to communicate with your committee as promptly as possible, assign them definite duties to perform. Each committee should have a meeting within the next few days and form definite plans for the year's work. In the meantime, or until you have a committee meeting, give special assignments to members of your committee. For example—Collecting information, reviewing laws, collecting statistics, etc., to be available for your meeting. It is suggested that you set a definite objective and then put forth every effort to attain it.

To the members of the committees: Perhaps your most important duty is your active wholehearted cooperation with your chairman. If you do not hear from the chairman of your committee within a week it is probable that his letter to you has been misssent and you should write to him for an assignment of your duties. Every member should take an active interest to see that his committee is functioning to full capacity. It is only by thoughtful, earnest effort we can accomplish most this year for your hospitals.

In conclusion, let's make this the best year since our organization. Our membership is increasing, enthusiasm is growing, hospital men and women throughout the State see more and more clearly the advantages and benefits of the State Hospital Association.

If during this hospital year I can give you any suggestions, furnish you any information, or be of service to you in any way, it will indeed make me very happy.

Very sincerely,
J. Gould Gardner, President.

MEDICAL WRITING (Continued).

From "The Art and Practice of Medical Writing," Simmons and Fishbein.—By Permission.

CAUSES OF THE REJECTION ON MANUSCRIPTS

"LACK OF SPACE.—During the past twelve years, from 1,500 to 2,000 manuscripts have been submitted each year for publication in *THE JOURNAL*. With such a large number of papers, 'lack of space' becomes a prominent cause for rejection; but, no matter how many papers may be on hand, a well prepared paper on a timely and practical subject, that will appeal to a fair

proportion of readers, especially to general practitioners, is always accepted. A paper that is informative, that presents new facts or practical information and that is fairly well written, is not returned. Naturally, therefore, there are other causes for rejecting manuscripts than lack of space.

"PLETHORA OF MATERIAL ON ONE SUBJECT.—A plethora of material on one subject, with the peril of devoting too much space to it, is one cause for the return of papers. This condition is likely to arise when a new treatment or theory is introduced, or during and immediately after an epidemic of some particular disease. The introduction of arsphenamin was followed by an ever-increasing lot of papers on the subject, all optimistic. Wright's opsonins and opsonic index produced a flood of articles of varying quality and character. Focal infection, long since swamped under a veritable deluge of manuscripts, is still a live subject in the minds of many physicians, although few offer anything new or conclusive. The tonsils and tonsillectomy, and especially instruments for doing tonsillectomies, have been sadly overworked subjects. Following the Great War, papers on war experiences constituted a noticeable percentage of all that were received. And yet, no matter how much a subject may have been discussed or how much space may have been devoted to it, it is not overdone as long as new, scientific evidence or new worthwhile facts are forthcoming."

(To be continued)

YAZOO, PLEASE HELP!

"Dear Mr. Editor:

"Through the courtesy of Dr. H. F. Byers, of Senatobia, I have received a photograph and the records of Dr. L. W. Kitchens, of Strayhorn, who died in service in the World War. We are lacking from this part of the History only the photograph and records of Dr. J. H. Steen, of Vaughan. Please ask the Yazoo County members to help.

"E. F. Howard, Historian."

HOLMES COUNTY.

Dr. J. J. Kazar, of Tchula, who is president of the Tchula Rotary Club, represented that organization at the annual convention of Rotary International at Seattle, Washington, and has recently returned from an extended western tour. He also attended the Sixteenth District Rotary Conference at Memphis, August 8 and 9.

Miss Martha Shearer, who has been doing county health work in Lee County, came to Holmes County August 1, to succeed Mrs. C. O. Howell, who recently resigned as county health nurse.

Dr. C. J. Vaughan, county health officer, spent his vacation during the week of August 8-15 at his home in Fort Payne, Alabama.

R. C. Elmore, County Editor.

August 8, 1932.

SIMPSON COUNTY.

Dr. A. E. Kennedy and family, of Magee, have just returned from Saluda, North Carolina, where Dr. Kennedy attended the Southern Pediatric Seminar.

Dr. M. O. Currie, Magee, has been in the local hospital with an attack of renal colic, but has recovered sufficiently to return to his practice.

Prof. R. T. Walker, teacher in the public schools of Honolulu, son of Dr. E. L. Walker, is now spending his vacation with his family at Magee.

The Magee Hospital at Magee is thriving, although a young institution. It seems that more room is needed to accommodate the public.

Dr. R. E. Giles, county health officer, is doing some very efficient work in the county by dispensing typhoid vaccine to the people.

Dr. M. M. Magee is now ill at his home in Magee.

E. L. Walker, County Editor.

Magee, August 8, 1932.

SECOND COUNCILOR DISTRICT.

The DeSoto County Medical Society met in regular session the first Monday in July—an interesting meeting. Dr. C. W. Emerson is the presiding officer.

The Tate County Society is carrying on. Dr. M. M. Powell is president.

The North Mississippi Medical Society is having regular meetings with much interest being manifested. Dr. H. P. Boswell is president of this society.

If I am not mistaken you will have more local news from this district than in the past.

The Mississippi News in our Journal is interesting and we all should strive to make it more so.

I have tried to comply with all requests and will send you such news as I can from time to time. Best wishes.

L. L. Minor, Councilor Second District.

August 7, 1932.

SHARKEY COUNTY.

Dr. B. T. Orendorf, of Rolling Fork, visited Cary friends recently. The doctor's friends are always delighted to have him with them.

Mr. Q. E. Gatlin, sanitary inspector for the Sharkey County health unit, has been transferred to another county in the state.

Dr. A. K. Barrier, director of the Sharkey County health unit, is very busy on his usual rounds. During the past month he has given a goodly number of typhoid "shots."

W. C. Pool, County Editor.

Cary, August 9, 1932.

YAZOO COUNTY.

Dr. Joe Roberts left recently for Longview, Texas, where he will be associated with Dr. Hurst, who is an eye, ear and throat specialist of that town. Dr. Roberts is a graduate of Tulane University, spent two years as an interne at New Orleans, practiced medicine for a year in Thornton, and has practiced in Yazoo City for the past several months. Dr. Roberts has a host of friends who regret his departure but who at the same time wish him great success in his chosen work. We will all miss Joe and hate to see him leave us.

Dr. J. H. Barrow, of Canton, my nephew, was a recent visitor in my home. He graduated recently at the University of Louisville and passed the Mississippi State Board examinations in July. He has gone to Indiana to take medical charge of a boy's school and also to teach chemistry and physics. We hate to see these young men leave our state.

C. M. Coker, County Editor.

Eden, August 9, 1932.

EAST MISSISSIPPI MEDICAL SOCIETY.

The East Mississippi Medical Society will meet at the suburban home of Dr. B. L. Robinson, on Lover's Lane, between Eighth street road and Fifth street road, two and one half miles from Meridian, Thursday, August 18, 2:30 P. M.

Program.

1. Anemia in Disease.—Dr. L. S. Lippincott, Vicksburg.

Discussion by Drs. L. Hart and A. G. Bryan.

2. Acute Surgical Abdomen.—Dr. E. L. Richardson, Louisville.

Discussion by Drs. L. V. Rush and W. R. Hand.

3. Diphtheria in Children.—Dr. F. G. Riley, Meridian.

Discussion by Drs. T. E. Jarvis and G. L. Arrington.

Dr. James M. Acker, President of the Mississippi State Medical Association, and Mrs. W. C. Pool, President of the Woman's Auxiliary to the Mississippi State Medical Association, will be the official guests. Mrs. Pool will address the ladies relative to organizing a local auxiliary.

Following the program picnic lunch will be served. Doctors and their wives are cordially invited.

J. S. Hickman, President.

T. L. Bennett, Secretary.

Meridian, August 10, 1932.

JONES COUNTY.

The South Mississippi Medical Society will hold its next regular meeting in Laurel, September 8, 1932. Doctors Landry and Burns, of New Orleans, Dr. Hand, of Waynesboro, Dr. Garrison, of Jackson, and Dr. Tucker, of Laurel, will read papers at this meeting.

Dr. W. N. Blount has moved his office from the Norman Building on Magnolia street to the Pine Hurst Building on Fifth avenue. Doctor says he finds it much more convenient to be on the ground floor where he has easy access to his roentgen ray laboratory.

Dr. R. H. Foster has moved his office from the First National Bank Building to his residence at 531 Fifth avenue.

Mrs. H. A. Wells, formerly roentgen ray and laboratory technician of the South Mississippi Charity Hospital has recently been employed by the city as city technician. Her services are also available to all physicians in Laurel and adjoining territory. She is the widow of the late Dr. H. A. Wells, and no doubt will have the co-operation of the entire medical profession of Jones County.

Doctors Joe Green and Bob McLaurin have opened offices in rooms 9, 10 and 11 in the O'Ferrell Building. Dr. Green will devote his practice to diseases of women and children, while Dr. McLaurin will do general practice and surgery.

Dr. L. Alexander, of Texas, has accepted the position of house surgeon of the South Mississippi Charity Hospital.

Dr. K. R. Cammack, who is in charge of a small hospital operated by a large sawmill in Gulf Hammock, Florida, is spending his vacation in Laurel.

Dr. and Mrs. R. H. Cranford, recently returned from the gulf coast, where they enjoyed a few days' vacation, and the doctor claims he did not put on his shoes after he got there until he was ready to come back, but says he felt like a million dollars. He stressed the point he imagined he felt like a man who had a million dollars but he had not seen a million dollars so could not say positively.

Roland Cranford, Jr., son of Dr. and Mrs. R. H. Cranford has returned to the city after a tour of the north and west, visiting Denver, Colorado, Yellow Stone Park, Wyoming, and North Dakota. He accompanied his friends, Mr. and Mrs. Hanes Montgomery. They were away three weeks.

The many friends of Dr. A. L. Harrison, of Stringer, are delighted to know that after a severe illness he is again able to be in his office. Dr. Harrison is one of the most popular members of our medical society and every one misses him when he is absent. Here is hoping that he will be able to be with us in our next meeting with his usual pep and wit which goes so far to make life worth while.

Dr. Chester A. Walker, formerly of Ovett, has moved his family to Gulfport, where the doctor has accepted a position at the Old Soldiers' Home.

Dr. Tom Ramsey, who has recently completed an internship at the Baptist Hospital in New Orleans, is now associated with his father, Dr. C. H. Ramsey.

Mr. and Mrs. Curtis Rogers are rejoicing over

the arrival of a nine pound boy. Mrs. Rogers will be remembered as Miss Grace Walker, popular registered nurse of Laurel, and sister of Dr. C. A. Walker.

Jos. E. Green, County Editor.

Laurel, August 10, 1932.

"Jackson, Mississippi

"August 9, 1932.

"Dr. Leon S. Lippincott,
Vicksburg, Mississippi.

"Dear Doctor Lippincott:

"Doctor Underwood, who is going away on the 'Know Mississippi Better Train' has asked me to write a brief statement for publication in the Journal with reference to an illegal practitioner.

"A few days ago, letters were received from two prominent citizens of Madison County to the effect that a negro, by the name of J. P. Conway, has been practicing in the neighborhood of Camden, Mississippi, Madison County, for several years with his specialty venereal disease. One citizen claimed that he had caused the death of a good many negroes.

"We sent Mr. W. E. Noblin, Jr., son of Dr. W. E. Noblin, County Health Officer, Hinds County, to the neighborhood, and he carried along our porter, Grant Goodwin. Mr. Noblin stopped on the side of the road while Grant Goodwin went in to see the negro doctor about two hundred yards off the road, where he presented his case and the negro prescribed certain medicines, one to be taken internally, which was contained in a pint fruit jar and the other, a rubbing ointment, placed in a snuff box.

"On the way back, an affidavit was made by the County Attorney, Mr. F. S. Dunning. The Sheriff immediately went out and arrested the negro practitioner and in day or two the negro came to Canton ready to plead guilty and was fined twenty-five (\$25.00) dollars. He agreed that he would practice medicine 'no more,' especially due to the fact that a second offense would carry a penitentiary sentence.

"Very truly yours,

"R. N. Whitfield."

GRENADA COUNTY.

Just a line by way of answering "roll call" and incidentally to help your score. No changes in our ranks since last report. No society or staff meetings and no sickness. Medically we are "status quo."

Only one case of typhoid in the county this year so far. I mention this only to emphasize the fact that this low incidence is due to extensive vaccination where ever a case occurs. The importance of this can not be too strongly urged.

For the second time this year the "grim reaper" has invaded our "outer circle." On August 5, Mr. Bob Clanton, father of our Dr. R. A.

Clanton, passed away in his 78th year. A fine citizen has gone from us. Out sympathy goes out especially to Dr. Clanton and his twin brother, Rev. A. T. Clanton, of Ruleville.

Your department of the Journal made an excellent showing in the last issue.

Accept congratulations.

Extremely hot weather and "general depression" are still with us but we are hopeful for better days to come.

T. J. Brown, County Editor.
Grenada, August 9, 1932.

PONTOTOC COUNTY.

Pontotoc is in the midst of celebrating the one hundredth anniversary of the signing of the Treaty of the Pontotoc. Below is the program:

August 9.—Tuesday.—Automobile trip to historic places. Appropriate exercises and barbecue dinner.

August 10.—Wednesday afternoon.—Historical pageant at fair grounds.

August 11.—Thursday afternoon.—Historical pageant at fair grounds.

August 12.—Friday. At Home. Home coming for individual families.

August 13.—Saturday morning.—Parade of floats.

Saturday afternoon.—Indian ball game sponsored by Mr. E. T. Winston.

August 14.—Sunday.—Services at churches honoring visitors.

We are expecting a number of doctors from other states that used to live in Pontotoc. Hope to be able to give you more next month.

R. P. Donaldson, County Editor.
Pontotoc, August 9, 1932.

HUMPHREYS COUNTY.

On July 7, Dr. J. S. Jackson, Belzoni, one of the county's pioneer physicians, had the misfortune to fall and break his left arm, the humerus, at or near the surgical neck.

On July 21, Dr. C. B. Holmes, Silver City, was drowned while fishing in Lake Atchafalaya. Dr. Holmes was born in Yazoo County. His age was 68. His death was our loss but his gain. Dr. Holmes was indeed a real family physician, true blue, always cheerful, strictly ethical. Sad but true the real family physician will soon be a thing of the past.

Dr. Berkley, Isola, is contemplating joining the ranks of the Cardinals; he is in reality a ball playing thing. To see him in action on third base, would really do you good; at the stick, O boy, he hits them high and long.

Dr. J. C. Higdon, Belzoni, recently had an attack of angina pectoris.

We welcome in our midst Dr. J. R. Jackson, Belzoni, graduate of the University of Tennessee in 1931.

Dr. G. M. Barnes recently made a business and pleasure trip back to his old home near Carpenter, Copiah County, and to his wife's home, Red Lick, Jefferson County.

G. M. Barnes, County Editor.
Belzoni, August 8, 1932.

COPIAH COUNTY.

Dr. J. M. Dampeer, of Crystal Springs, died July 14 and was buried in the family cemetery at his home city the following day.

In the death of Dr. Dampeer we lose one of our best family physicians, a Christian gentleman, a former member of the State Board of Health, and one who always stood for honor in and out of medicine.

Dr. A. H. Little, wife and son, Oxford, spent their summer vacation in the home of Dr. Little's father, Dr. W. L. Little, at Wesson. They enjoyed several successful fishing trips.

Dr. R. B. Zeller, Jackson, has secured offices in Hazlehurst, where he expects to begin practice within the next ten days. He has been connected with the Insane Hospital at Jackson for several years.

W. L. Little, County Editor.
Wesson, August 5, 1932.

WINSTON COUNTY.

Dr. W. W. Hickman has moved from Louisville to Picayune, taking over contract for practice with the L. O. Crosby Saw Mill Co. We hope he may be pleased with his new work.

Dr. W. W. Parks was absent at the Rotary meeting Wednesday. We are sure practice is picking up with him.

Dr. E. L. Richardson speaks of an inspection of our city, looking after sanitary measures.

The doctors of this section are looking forward with interest to the medical meeting of the association at Meridian, the 18th.

It seems that the most prevalent illness of this section at present is malaria. However, we have some few cases of typhoid fever.

Dr. W. B. Watkins, of Noxapater, who received an injury in a car wreck some time back, is out and doing pretty well at this time.

We are having quite a few cases operated on for different conditions through this section in Meridian, Jackson and other points.

We feel that the different associations of doctors should collectively sponsor a move to the Legislature to allow more funds for the charity hospitals in Mississippi, as they are inadequate to handle but very few charity cases.

M. L. Montgomery, County Editor.
Louisville, August 3, 1932.

LEFLORE COUNTY.

Dr. J. C. Adams and family have just returned from Texas where they attended the annual re-

union of the Guess family. There were 138 families represented.

We sympathize with Dr. George Baskervill in the death of his sister in Richmond, Va. He spent ten days in Richmond and Norfolk.

We are glad to report that Dr. F. M. Sandifer is very much improved in health after a month's illness.

Dr. R. J. Peterson has located at Columbia to practice medicine after visiting relatives here.

Dr. Julius Davidson and family of New Orleans have been visiting relatives here a few days this month.

Dr. O. S. Warr, Memphis, Dr. D. C. French, Water Valley, and Dr. W. R. Best, Scobey, were among the visitors to Greenwood during July.

W. B. Dickins, County Editor.

Greenwood, August 4, 1932.

MISSISSIPPI STATE BOARD OF HEALTH.

Dr. Felix J. Underwood announces that the State Board of Health has arranged with the Federal Children's Bureau for Dr. James R. McCord, Professor of Obstetrics and Gynecology, Emory University School of Medicine, to give four additional courses in obstetrics for the physicians in Mississippi—one week in October, one in November, and two weeks in December. Dr. McCord has already given courses of lectures at the following places: Indianola, New Albany, Vicksburg, Laurel, Houston, Brookhaven, Jackson, Meridian, and Gulfport. Many expressions of appreciation of this course have been received by the State Board of Health.

Dr. Marta Robert, Chief of the Division of Child Hygiene, Porto Rico Department of Health, spent a week in Mississippi in July observing and studying the maternal and infant hygiene activities of the State Board of Health. Dr. Robert was especially interested in the work done with the midwives.

Recent visitors to observe Mississippi's health program: Dr. P. L. Querens, Tulane University, New Orleans, La.; Mrs. G. E. Pittman, Atlanta, Georgia; G. E. Pittman, Atlanta, Georgia; M. P. Morris, Atlanta, Georgia; Miss Lenore Banker, Cincinnati, Ohio; W. M. Conner, Cincinnati, Ohio; Dr. Taliaferro Clark, U. S. Public Health Service, Washington, D. C.; Dr. C. J. Hollister, Department of Health, Harrisburg, Pa.; V. M. Ehlers, Chief Sanitary Engineer, Texas State Board of Health; Dr. Carl E. Buck, American Public Health Association, New York.

DR. WOODWARD D. BEACHAM

In recognition of the valuable and unselfish services of Dr. Woodward D. Beacham in the field of public health beginning during the period of transition from sanitary supervision of disease prevention when emphasis was shifting from environment to the individual, the Mississippi

State Board of Health, in regular meeting assembled on June 27, 1932, wishes to express its sense of personal loss in the death of Dr. Beacham and its appreciation of his services as a health officer.

Dr. Beacham wrought long and well in his efforts to benefit his fellowmen and left an enduring monument to his personal character and integrity and to his ability as a sanitarian in the improvements brought about as a result of his energy, fearlessness, and courage.

The results obtained by Dr. Beacham in Forrest County are outstanding and have been used as an illustration of the value of full-time health work perhaps more often than those obtained in any other county; the last time being at the 1931 meeting of the American College of Physicians, Baltimore, Maryland.

Be it, therefore, resolved that this expression of appreciation be sent to the family of Dr. Beacham, that a copy be furnished the official organ of the Mississippi State Medical Association, also that this appreciation be spread upon the minutes of this meeting of the Board.

HINDS COUNTY.

Dr. Halfacre of Sumrall has recently moved to Jackson where he will be a member of the medical staff of the insane hospital.

Dr. Lawrence Long and Dr. Joe Flynt Armstrong are attending camp with the National Guardsmen at Camp Beauregard, Alexandria, La.

Dr. E. J. Banks, former member of the staff of the State Insane Hospital, is planning to open offices in Jackson soon for the general practice of medicine.

Dr. M. C. Henry, formerly of Detroit, Michigan, has recently opened offices in Jackson for the general practice of medicine.

Dr. Wm. F. Hand has just returned from North Carolina where he spent two weeks at Fort Bragg attending the Reserve Officers' Camp.

Dr. Harvey F. Garrison, Jr., has recently opened offices in Jackson and is associated with his father, Dr. H. F. Garrison, doing pediatrics.

Dr. F. L. Van Alstine is spending a very delightful vacation in Colorado Springs, Colo.

Dr. L. B. Mosely, who has recently been commissioned first lieutenant in the Naval Medical Reserve Corps, is anticipating a very delightful cruise in the Mediterranean and Caribbean seas in the latter part of August.

Wm. F. Hand, County Editor.

Jackson, August 4, 1932.

LOWNDES COUNTY.

Dr. Walter C. Brewer, surgeon in charge of Columbus Hospital, has returned from Rochester, Minn., where he spent thirty days in the Mayo Clinic brushing up on the advances in surgery.

Dr. E. Q. Withers, of the eye, ear and nose department of Fite hospital, has returned from

his vacation spent in and around Macon and Brooksville. He reports a delightful time and relates many mammoth fish stories.

Dr. C. E. Lehmborg, health officer of Lowndes County, and captain Medical Corps, 17th Field Artillery, Mississippi National Guard has returned from a two week's encampment of his detachment at Camp Knox, Ky.

Dr. Sarah Castle of Meridian comes the first of the session of Mississippi State College for Women to assume her duties as resident physician at this institution. Dr. Castle holds degrees from several outstanding institutions and has done graduate work at Johns Hopkins and the Mayo Clinic, Rochester, Minn. She has had long and successful experience as superintendent of the Meridian Sanitarium and also as a general practitioner. The physicians of Columbus welcome Dr. Castle to the local fraternity.

Dr. J. W. Lipscomb, Jr. resident surgeon at Jamaica Hospital, Richmond Hill, N. Y., reports that the charity wards are full to overflowing but that pay patients are conspicuous by their absence.

And along comes the big New York specialist in health examinations and says "The high cost of medical care is due to the general practitioner." Now, ain't that funny? Might as well say, "The cause of the depression is the day laborer."

J. W. Lipscomb, County Editor.

Columbus, August 4, 1932.

MONROE COUNTY.

The first days of August are here hence it is time for me to "punch the ball" to show that I am not "asleep on the job."

I wonder if any one has inquired if it is hot enough for you? I should like to make this inquiry myself, but for fear I might be repeating an "oft told tale" I will deny myself this pleasure. But in spite of the almost unbearable heat and the incomparable financial stringency that is upon us, our (my) doctors stay well. Not a grunt have I heard from one of them since my last communication. And since there is not a widower or unmarried one in our number (family), of course, there have been no weddings among us. However, if I may be allowed to tattle, I will say that there are rumors afloat that one of our near neighbors (just over the county line) is likely to perpetrate such a deed before the "dog days" pass away. When it is perpetrated, I shall move that a special badge for bravery in action be voted him; for any man who will dare undertake to provide for another in such times as these must be brave indeed. But what can be said for the courage of the prospective bride? She surely deserves a place among our heroines! However, my good wishes and blessings shall follow them. More anon!

How I wish all my friends might have been our guests at the meeting of the "Thirteen Counties" held here in June. Our next meeting will be at

Houston (the most gracious and hospitable little city in all our fair land) on the twentieth of September. Houston's challenge, ever is "come one, come all." I know a welcome awaits any of our friends and colleagues, so I, too say *come*.

I expect you, Mr. Editor, and my readers, too, will be glad to know that the excessive heat forces me to close this epistle. But with the coming of cooler weather I shall try to make amends for my "brevity" (?) this time.

C. S. Bryan, County Editor.

Amory, August 3, 1932.

ISSAQUENA COUNTY.

Taking advantage of the special reduced rates on the railroads of \$21.00 for the round trip, this Issaquena scribe made a pilgrimage to our historical City of Washington in June.

The George Washington Bi-Centennial Commission recommends and advises that every good, patriotic American citizen honor the memory of the Father of his Country by making a pilgrimage to our nation's capital this year, the 200th anniversary of Washington's birthday. In the past history of the world no man has ever been so honored before. The heart of proud America may swell with pride.

Joining in the movement the railroads, all water craft, and transport companies by land, air and sea have placed their rates so low that even the poorest American may hope to make the itinerary. The movement is not confined to America alone, but the whole world is joining in honoring our beloved Washington, the world's greatest patriot of all time. Thus our City of Washington has become the Mecca of the universe.

I made a lucky chance collection of an insurance bill early in June, and being patriotically inclined myself, this writer easily decided to take the trip and pay homage to our great Washington, and see the world at the same time. What he saw in the way of nature's scenery, wild craggy mountains, beautiful valleys and rivers, great cities, wonderful specimens of buildings and engineering, statuary and paintings representing the finer arts, made the famous seven wonders of the ancient world fade into insignificance.

Going up over the Southern Railway approaching Lynchburg, Va., in the early morning, our train suddenly dashed out of a tunnel and literally flew around a sharp curve cut out of the solid rock of the mountain side, with the outside rail lowest. Only a miracle kept the coach from turning over. Such racing! Jehu never rode more recklessly. I felt suddenly dizzy. Goose bumps appeared, and my hair stood on end. As the other passengers remained inactive, too stupid to sense danger, a spark of hope rose within me. Maybe we would not be dashed to death down the mountainside. Timidly I glanced out of the window. A beautiful, peaceful valley in a high state of culti-

vation spread out fully six hundred feet below us on one side. On the other side a rugged wall of rock rose precipitously a sheer thousand feet above us. What a place to build a railroad! If they had come down here to our Mississippi Delta we would have given them a fifty mile stretch as level as a floor, and as straight as an arrow. But the train sped onward as unconcernedly as if it were running on level ground. Several times it suddenly shot out into space, and I thought we were goners. But cautiously looking out of the window, I caught glimpses through the fleeting clouds of the tree tops hundreds of feet below. We were crossing a gorge on a trestle built on stilts of about the size and proportions of a crane's legs. In agony of fear I cried out aloud, "What a fool engineer to run a train load of people over such mountains and defiles at such speed." I implored the conductor to have him slow up, but only received a sickly smile in reply. A sympathetic passenger sitting near me reassuringly volunteered that he had passed over this stretch of road three times and was still living. This gave me hope anew, and later, when the train again got down on the ground, I wondered if it were barely possible for me to get back home alive. Strange to say, I did, and am now living to tell the story. But truly I will say that the dangers that Othello went through were not one whit greater. To be continued.

W. H. Scudder.

Mayersville, August 11, 1932.

ISSAQUENA - SHARKEY - WARREN COUNTIES MEDICAL SOCIETY.

A regular meeting of the Issaquena-Sharkey-Warren Counties Medical Society was held at the Y. M. C. A., Vicksburg, on Tuesday, August 9, at 7:15 p. m. with nineteen members and four guests present.

The scientific program was as follows:

1. Ectopic pregnancy.—Case report.—Dr. R. A. Street Jr.

Discussed by Drs. W. H. Parsons, Vicksburg; W. H. Scudder, Mayersville; J. A. K. Birchett, Jr., Vicksburg; S. W. Johnston, Vicksburg; N. B. Lewis, Vicksburg; E. F. Howard, Vicksburg, and H. H. Haralson, Vicksburg. Dr. Street closed.

2. The Bite of the "Black Widow."—Dr. H. S. Goodman.

Discussed by Drs. J. A. K. Birchett, Jr., Vicksburg; L. S. Lippincott, Vicksburg; G. M. Street, Vicksburg; W. E. Johnston, Vicksburg, and W. H. Scudder, Mayersville. Dr. Goodman closed.

3. Prevention of Typhoid and Diphtheria as a Public Problem.—Dr. H. H. Haralson.

Discussed by Drs. H. S. Goodman, Cary; G. M. Street, Vicksburg; S. W. Johnston, Vicksburg; F. M. Smith, Vicksburg, and L. S. Lippincott, Vicksburg. Dr. Haralson closed.

Dr. Thomas P. Sparks, Jr., Vicksburg, was unanimously elected to membership in the society.

The next meeting of the society will be held on September 13 at the Y. M. C. A., Vicksburg. The committee in charge of program is Dr. W. H. Parson, Chairman; Dr. D. A. Pettit, Dr. P. S. Herring, Dr. B. B. Martin, Dr. A. K. Barrier, Dr. E. B. Stribbling, Dr. J. B. Benton, Dr. W. H. Scudder, Dr. G. W. Gaines, Dr. M. J. Few.

LINCOLN COUNTY AND TRI-COUNTY MEDICAL SOCIETY.

The Tri-County Medical Society will meet in regular session September 13, at Monticello, guest of Lawrence County physicians, who are always loyal and attend all programs whether in their home country or elsewhere in the district of the Tri-County Society.

A scientific program will be rendered as usual and the president of the Mississippi State Hospital Association, Dr. J. Gould Gardner, is invited and will give the Society the benefit of his views on hospitals and allied topics. We expect a full attendance and an illuminating and profitable meeting.

The Eighth Councilor District Medical Society will hold its annual meeting in McComb City, October 11, noon. The annual banquet will be arranged by the committee on arrangements of the host society, the Pike County Medical Society, after which the scientific program will be given by distinguished medical men from without the state. All are men of ability and representatives of institutions of advanced medical thought. Councilor W. H. Frizell, chairman of the program committee, held a conference with other members in McComb City, August 3 to arrange for the essayists.

President James M. Acker of the Mississippi State Medical Association will address the Society as will also our President-Elect, J. W. D. Dicks, who is always a live wire in this organization, being one of the organizers of the society, as Councilor of the 8th District at the time.

Dr. J. G. Gardner, president of the Mississippi State Hospital Association, is to be our guest on this occasion and will address the organization on his favorite theme.

A more extended detail of the plans and program will be given to the members and public as soon as they are worked out by the committee. Those in charge wish to assure the membership that they are striving to have as strong a program as we have had hitherto.

The Staff of the Brookhaven King's Daughters' Hospital met in regular monthly session, Tuesday, August 3, at 7:30 P.M., with all members present. After routine business was disposed of there were scientific discussions of interest to all

given by Dr. O. N. Arrington, being a preliminary report of a thoraco-abdominal abscess in a young white female, and Dr. F. E. Collins, who discussed "Arthritis" with report of cases and also from the current literature.

Dr. J. T. Butler, dean of the profession in Brookhaven, and at the last session of the State Association made a "Life Honorary Member" of the Association, is spending a protracted vacation on the beautiful Mississippi Gulf Coast, in New Orleans and in Beaumont, Texas, with his son, Hon. Charles Butler. Dr. Butler will soon return to his practice which he has enjoyed for more than fifty-four years, and as physician to Whitworth Female College.

Dr. Marvin Arrington has recently finished his internship in Chattanooga, Tenn. and returned home and located in Brookhaven.

Dr. W. P. Tucker, recently located here, has the sympathy of his fellows in the serious illness of his wife, who has been nursing at Parchman State Penitentiary. Dr. Tucker rushed her at once to Memphis for hospitalization. We wish her a speedy recovery and early return to their adopted home.

W. H. Frizell.

Brookhaven, August 11, 1932.

CENTRAL MEDICAL SOCIETY.

The Central Medical Society held the July meeting at the Robert E. Lee Hotel at 7 p.m., July 19. About fifty members and guests assembled on the roof garden, where an elegant banquet was served. After music and dancing of some spectacular "adagios" by the Magnolians and Mlle. Benadetta, the scientific program was carried out.

Dr. A. L. Gray of Hazelhurst read a paper on "Tularemia", which was discussed by Dr. Eubanks of Crystal Springs. Special attention was called to the similarity of tularemia, in one type, to typhoid fever.

Dr. H. A. Kroeze read a paper on "Milk Sanitation," which was discussed by Dr. Kemmerer of the State Board of Health. The necessity for standardization of methods of milk sanitation, and of uniform ordinances was discussed and a plea made for the more general use of pasteurized milk.

There will be no meeting of this society for the month of August.

D. W. Jones.

Jackson, August 11, 1932.

EAST MISSISSIPPI MEDICAL SOCIETY.

"Meridian, Mississippi

"August 12, 1932.

"Dear Doctor:

"During the coming week, Tuesday, Wednesday, and Thursday, a series of lectures on med-

ical subjects by teachers and doctors of recognized ability are to be given in Meridian at the Lamar Hotel. A program announcing the subjects, the hour of lectures and clinics, together with the speakers, is enclosed.

"For some time, no doubt, you have known of the efforts made by the medical association to bring just such a meeting to this section. At last, their activities have been crowned with success! In as much as the men are outstanding because of their ability in their respective subjects, and for the additional reason that all of us can not take post-graduate courses in school as we would like, we trust that a large attendance will be evidenced during these few days of lectures. We hope to make this an annual event and that it will be bigger and better through the years. Funds for conducting this course have been made available to the East Mississippi Medical Society by the Commonwealth Fund.

"Be sure to come yourself, and speak to your doctor friend about the meeting and ask him to come with you.

"Looking forward to seeing you at this meeting, and with best wishes, I am

"Very truly yours,

"T. L. Bennett, M. D., Secretary."

ANNOUNCING THE PROGRAM OF THE EAST MISSISSIPPI POST-GRADUATE MEDICAL INSTITUTE, MERIDIAN, MISSISSIPPI

August 16 to 18, 1932, Inclusive.

Tuesday, August 16—2-4 p.m.—Dr. W. Jeff Anderson, Meridian, introduces Dr. Alfred Blalock, Associate Professor of Surgery, Vanderbilt University.

Subject—The Treatment of Non-Tuberculous Infections of the Chest (Clinics may be presented).

6-8 p.m.—Dinner Meeting.

The Treatment of Pulmonary Tuberculosis—By Dr. Alfred Blalock.

(The above discussions will be from a medico-surgical viewpoint).

Wednesday, August 17—3-5 p.m.—Dr. T. B. Bourdeaux, Meridian, introduces, Dr. J. B. McElroy, Professor of Medicine, University of Tennessee.

Subject—Discussion of the Diseases of the Kidneys

(Clinics may be presented).

6-8 p.m.—Dinner Meeting—Dr. A. C. Bryan, Meridian, introduces Dr. Battle Malone, Professor of Surgery, University of Tennessee.

Subject—Discussion of the Gallbladder Diseases.

Thursday, August 18—9:30-11 a.m.—Dr. G. L. Arrington, Meridian, introduces Dr. Horton

Casparis, Associate Professor of Pediatrics, Vanderbilt University.

Subject—Diseases of Early Childhood.

4:00 p.m.—Dr. Casparis will present a discussion to the meeting of the East Mississippi Medical Society.

The above program is the first of a series of programs of what is hoped may be an annual event in this city. This meeting has been made possible by an allotment of certain funds by an organization handling an estate, the will of the deceased holder of the estate specifying that the proceeds of the estate be used "for the benefit of mankind". The aim of the committee has been to bring the Meridian territory members of the medical profession recognized as having ability as teachers and doctors who may impart valuable and useful information to those physicians who attend these meetings to the end that illness may receive better treatment, that some may be prevented, and that the length of life may thereby, at least in some instances, be prolonged. It is the wish of the committee that the course of lectures and clinics prove of such value.

C. R. Sringly, Chairman, Program Committee.

JACKSON COUNTY.

Our doctors are keeping so quiet until I am unable to get much news from them. As speckled trout are beginning to bite I hope to have a nice fish story next time.

S. B. McIlwain, County Editor.

Pascagoula, August 11, 1932.

HARRISON-STONE-HANCOCK COUNTIES MEDICAL SOCIETY.

The Harrison-Stone-Hancock Counties Medical Society met August 3, at the Biloxi Hospital, Biloxi, with the usual excellent attendance. Dr. Virginia Hickerson, of Franklin, Tenn., a former graduate of the University of Mississippi and now affiliated with the Rockefeller Foundation doing special roentgen ray study in tuberculosis, was a welcome visitor.

Two applications for membership were received from Dr. Schmidt and Dr. E. E. Wadlington, newcomers at Biloxi.

A very interesting and somewhat unusual paper was presented by Dr. Eugene A. Trudeau of Biloxi, subject, "Peritonitis in the Fetus and Newborn," with citation of a case.

Dr. Rafferty of Pass Christian, representing the Ladies' Auxiliary extended an invitation to hold the September meeting of the Society at Pass Christian where the ladies will conduct a garden party on the lawn of Dr. Rafferty's palatial home. The invitation was also extended to the chief and assistant chief of staff of the Veterans' Hospital, the superintendents of the Biloxi and

Gulfport Hospitals, and the wives of the members of the Society. Dr. Rafferty is noted for his hospitality and a pleasant evening is assured all who attend.

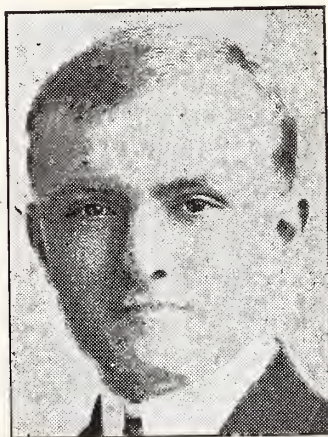
Papers for the next meeting will be presented by Drs. Shipp and Carroll on "Medical and Surgical History."

Dr. Paul Reiss, a specialist of New Orleans, La., is reported quite ill at his summer home in Pass Christian. A speedy recovery is hoped for by his many friends.

George F. Carroll, County Editor.

Biloxi, August 11, 1932.

LEST WE FORGET



HUGH ZOLLIFFER BROWNE

Kosciusko, Mississippi

Died of influenza while on duty as an instructor at Camp Oglethorpe.

WOMENS AUXILIARY TO THE MISSISSIPPI STATE MEDICAL ASSOCIATION

Mrs. Leon S. Lippincott, Press and Publicity Chairman.

WARREN COUNTY.

Mr. and Mrs. Percival Stern and children of New Orleans have been the house guests of their uncle and aunt, Dr. and Mrs. S. Myers.

Mrs. Willard H. Parsons was recently heard over the radio, from station WQBC, in a beautiful piano program. Mrs. Parsons is one of Vicksburg's favorite artists.

Dr. and Mrs. Rollin Cutts have departed for their home in Minnesota. Dr. Cutts was formerly a member of the staff of the Vicksburg Hospital.

Mrs. J. C. Greenoe of Trenton, Missouri is visiting Dr. and Mrs. Preston Herring of the Vicksburg Infirmary. Mrs. Greenoe is being warmly welcomed as she is the wife of the former pastor of the First Baptist Church and lived in Vicksburg many years.

Dr. and Mrs. Leon S. Lippincott have as their

house guests their nephew, Jimmie Holcomb and his chum, Roy Aycock, from Patterson, Louisiana. Roy is the son of Dr. and Mrs. G. G. Aycock, Patterson.

Mrs. W. C. Pool, president of the Women's Auxiliary to the Mississippi State Medical Association, and Mrs. H. S. Goodman, both of Cary, were guests of Dr. and Mrs. A. Street in July.

Dr. and Mrs. M. H. Bell have returned from Johns Hopkins, and are now at home to their many friends.

Dr. and Mrs. Guy Jarratt have as their guest, Mrs. Jarratt's sister, Miss Ann Black of Blytheville, Ark.

Mrs. H. H. Haralson, Publicity Chm.
Vicksburg, August 10, 1932.

HINDS COUNTY.

Dr. and Mrs. G. C. Russell left August 3 by automobile for Rochester, Minnesota, where Dr. Russell expects to visit the Mayo clinic.

Dr. W. W. Diamond has left Jackson and opened a small hospital at Magee.

Mrs. W. L. Hughes, Publicity Chm.
Jackson, August 10, 1932.

SHARKEY COUNTY.

Dr. and Mrs. E. B. Stribling were recently called to Philadelphia on account of the illness of Mrs. Stribling's mother.

Miss Ethel Goodman, daughter of Dr. and Mrs. H. S. Goodman, motored to Virginia for the month of August.

Mrs. H. S. Goodman, Publicity Chm.
Cary, August 10, 1932.

HARRISON-STONE-HANCOCK COUNTIES.

The Women's Auxiliary to the Harrison-Stone-Hancock Medical Society has decided not to take the usual annual vacation, and has met every month this summer, feeling that busy brains and hands could help much more in the morale of the community than idleness. Our husbands carry on—why not us?

As our summer job, we selected the things needed at the King's Daughters' Hospital at Gulfport that we could handle financially, such as new curtains, repairing a large trellis which was erected by the auxiliary several years ago, and painting and doing over furniture in one or more of the rooms. One hundred yards of curtain material was divided and given out to the members to make at the July meeting; paint was ordered for two or more rooms.

Mrs. E. C. Parker, Mrs. C. A. McWilliams and Mrs. J. D. Williams were asked to look after this work and Mrs. Donald Rafferty took as her job, the doing over of the furniture of the Auxiliary rooms.

On August 4, the members of the auxiliary met in the home of Mrs. Donald G. Rafferty at Pass Christian. Enthusiasm was shown in the work accomplished during the past two months and the prospects of future activities. A total of thirty-five pairs of curtains were turned in ready for hanging at the King's Daughters' Hospital in Gulfport, these having been made the past month by the various members.

Feeling the need of funds to further the improvements planned, it was voted that the society give a garden party at the Rafferty home, Wednesday, September 7. Tentative plans were made and it is felt sure that it will be a financial success. Mrs. George Melvin, president, presided and will serve with all committees furthering the September event. The meeting adjourned to meet August 6 at the home of Mrs. M. M. Snelling at 10 a. m. when plans will be completed.

Dr. and Mrs. Dan Williams are spending two weeks in August at Monteagle, the famous Chattanooga resort in the mountains of Tennessee.

Dr. Emma Gay and young daughter, Mary Elizabeth, are expected home about the middle of August, from a European trip which included Dr. Gay's native land, Switzerland.

Dr. and Mrs. Henry Boswell and family spent several days on the coast in July as the guests of Dr. and Mrs. D. J. Williams.

Mrs. D. J. Williams, Publicity Chairman.
Gulfport, August 10, 1932.

HOMOCHITTO VALLEY.

The Auxiliary to the Homochitto Valley Medical Society met on the second Thursday in July at the home of Mrs. J. W. D. Dicks, Natchez, at 2 p. m., with 15 members present, five of whom were out of town members.

After a delicious luncheon the meeting was called to order by our president, Mrs. C. E. Mullins. The minutes of the last meeting were read and approved.

Mrs. R. D. Sessions read a very interesting article, "The First Surgical Case," Jane Todd Crawford Memorial.

A committee of three was appointed to discuss the elections of officers to take place at the October meeting which will be held at the home of our president, Mrs. C. E. Mullins, Bude.

Mrs. Wm. K. Stowers, Publicity Chairman.
Natchez, August 10, 1932.

HONOR ROLL.

The following contributed to the Mississippi sections of the Journal this month:

County Editors.—R. C. Elmore, E. L. Walker, W. C. Pool, C. M. Coker, Jos. E. Green, T. J. Brown, R. P. Donaldson, G. M. Barnes, W. L. Little, M. L. Montgomery, W. B. Dickens, Wil-

liam F. Hand, J. W. Lipscomb, C. S. Bryan, W. H. Scudder, W. H. Frizell, S. B. McIlwain, George F. Carroll.—19.

Counties Societies.—East Mississippi Medical Society, T. L. Bennett; Issaquena-Sharkey-Warren Counties Medical Society; Central Medical Society, D. W. Jones; Harrison-Stone-Hancock Counties Medical Society, George F. Carroll; Tri-County Medical Society, W. H. Frizell; Eighth Councilor District Medical Society, W. H. Frizell; DeSoto County Medical Society, L. L. Minor.—7.

Hospitals.—Mississippi State Hospital, Jackson, C. D. Mitchell; Jackson County Hospital, S. B.

McIlwain; King's Daughters' Hospital, Greenville, F. M. Acree; Greenwood-Leflore Hospital, W. B. Dickins; King's Daughters' Hospital, Brookhaven, R. A. Savage; Vicksburg Sanitarium.—6.

Other Contributors.—D. J. Williams, E. F. Howard, J. Gould Gardner, L. L. Minor, R. N. Whitfield, F. J. Underwood, R. B. Zeller, Mr. G. D. Stanley, A. G. Payne, A. Street, W. E. Johnston, Mrs. H. H. Haralson, Mrs. W. L. Hughes, Mrs. H. S. Goodman, Mrs. D. J. Williams, Mrs. W. K. Stowers, Mrs. Leon S. Lippincott.—17.

Grand total—49. *Your editors thank you!*
Let's have 82 next month! !

BOOK REVIEWS

Clinical Atlas of Blood Diseases: By A. Piney, M. D., M. R. C. P. and Stanley Wyard, M. D., M. R. C. P., Philadelphia, P. Blakiston's Son & Co., Inc., 1932. pp. 105. Price \$4.00.

Under the able direction of Dr. Piney and Dr. Wyard, Mr. J. R. Ford has given us some of the best colored plates of blood cells that has appeared in recent years. Except for the eosinophils on page 53 which are too diagrammatic (outlined eosinophilic granules) his drawings are splendid. Particularly should he be commended for the correctness of the azure and purple values. Less well done are the four black and white drawings which are guilty of the common fault of many pathological drawings, viz., the cells are boldly outlined. Judging many of the pictures that have appeared lately in various hematology and pathology books one might think that the first qualification for a job as medical text book illustrator should be an apprenticeship under McClelland Barclay.

An outline of the essentials of hematology accompanies the plates.

MAURICE SULLIVAN, M. D.

Handbook of Tropical Fever: By N. P. Jewell, M. D., D. P. H., F. R. C. S. I., and N. H. Kauntze, M. D., D. P. H., New York. William Wood and Company, 1932. pp. 485. Price \$6.00.

In this excellent consideration of the principal fevers occurring in the Tropics, the authors state that they have endeavored to give a clear and adequate description and that the work is especially intended for medical students and medical practitioners in the Tropics and more temperate climates. Careful reading of the work convinces one that it has achieved its purpose and that it is a work that will prove useful for the clientele for which it is written.

It is rather surprising to see amebiasis included among the tropical fevers for, although fever may be present in this condition, it is cer-

tainly not a tropical fever. It is also noted that there is a confusion in the minds of the authors as to acetarsone. In one place "Stovarsol" is mentioned as useful in the treatment of amebiasis and on the next page acetarsone is also mentioned as being useful. It is evident that the authors are unacquainted with the fact that acetarsone is identical with "Stovarsol," the name acetarsone being that adopted by the Council of Pharmacy of the American Medical Association to replace the trade name "Stovarsol".

It is noted that Rocky Mountain spotted fever and Tsutsugamushi fever are included under the general term "Typhus Fever". While it must be admitted that there is still room for much more research on these fevers before their identity or non-identity can be definitely decided, it would appear the part of wisdom to consider them as definite disease entities until there is consensus of opinion as to their real nature.

The book can be recommended to the practitioner and student as an excellent summary of the fevers of the Tropics, especially well up-to-date in the sections treating of etiology, prophylaxis and treatment.

CHARLES F. CRAIG, M. D.

History of Medicine in the United States: By Francis R. Packard, M. D., New York, Paul B. Hoeber, Inc. 1931. 2 vol. Price \$12.00.

A timely work replete with historical facts which should prove interesting and illuminating not only to the students of medical history, but to every American physician.

Although the author states that his history is more or less confined to the story of the development of institutions and the narration of lives of men who have influenced the medical practice and thought of their time, it is thorough and a masterly prepared annal of the evolution of medicine in the United States during the last two centuries which was as rapid, as phenomenal and as marvelous as the one of this country itself, from its colonial

period to its present state of wealth, power and culture among the nations of the universe.

Volume 1 is practically altogether confined to the history of medicine during the colonial period. It is most interesting, it reads like good fiction, and from cover to cover grips the attention of the reader. This volume includes the following chapters: Medical Events Connected with the Early History of the English Colonies in America; Epidemic Sickness and Mortality in the English Colonies of North America from its Earliest Discovery to the year 1800; Early Medical Legislation; The Earliest Hospitals; Medical Education Before the Foundation of Medical Schools; The Earliest Medical Schools; Pre-Revolutionary Medical Publications; The Medical Profession in the War for Independence.

The second volume relates the history of medicine in the United States during the nineteenth century. It includes the History of the Medical Department of the United States Navy, and of the Medical Schools founded during the first half of the nineteenth century, among which is mentioned the Medical College of Louisiana, which in 1884 changed its name to that of the Medical Department of Tulane University.

The chapter entitled "The Beginnings of Specialism in America" is thorough and should be read by every specialist. It includes obstetrics and gynecology. It gives a masterful presentation of the development of laryngology and otology as specialties in the United States. The narration of the evolution of ophthalmology as a specialty in this country is most illuminating. Pediatrics and neurology are given deserved attention.

Every chapter of this history is a volume in itself. Although this work is well documented it never lags in interest. It is the work of the master historian. This history should be read by every physician because by so doing he will acquire a greater appreciation of the achievements of our medical predecessors in this country.

A. E. FOSSIER, M. D.

The Costs of Medicine: By C. Rufus Rorem, Ph. D., C. P. A., and Robt. B. Fichelis, B. S., Phar. D. Chicago, University of Chicago Press. 1932. pp. 250. Price, \$2.50.

This is the 14th of the series of publications developing from the work of the "Committee on the Costs of Medical Care."

This volume of about 250 pages contains a wealth of information that is almost beyond compute. The whole subject of wholesale, retail and manufacturing pharmacy as we have it today is discussed with a clearness that your reviewer has not found elsewhere. The present trends of these related groups are indicated. We might say that the handwriting on the wall is authentitatively interpreted. We find such data as the average ex-

penditures for medical care in this country and the part of this that goes for medicine proper, this being further subdivided into the average outlay for prescriptions, for patent medicines, etc. The various groups, as urban, town and rural are contrasted. It is very interesting to note that the drug bill of this country is about \$715,000,000.00 annually, and that, of this, only about \$140,000,000.00 is for prescriptions, while \$335,000,000.00 is for so-called patent medicines sold over the counter. The financial prospects of men in pharmacy has been followed out in large groups with very interesting findings and deductions. There is included in this volume a most excellent history of pharmacy and the various pharmaceutical and related organizations. It might be well for our Medical Schools to note that the Doctors of the United States average writing about four prescriptions a day. The subject of drug advertising is completely covered, the annual bill for this being about \$70,000,000.00, only about two and a half million of which is directed to physicians. The compilers of this work seem to have kept in mind, throughout, the relation of the physician to this data as a whole, and it will be found exceedingly interesting reading.

O. W. BETHEA, M. D.

Medical Formulary: By E. Quin Thornton, M. D. 13th Rev. Ed. Philadelphia. Lea and Febiger. 1932. pp. 352. Price, \$2.50.

The matter of prescription writing is so little stressed by the Medical College of today, and the detail men are so actively presenting the medical profession with various and sundry "cure-alls", that anything looking towards proper prescription writing is welcome. It is really more than a formulary. It is almost a treatise on prescribing.

There is a preliminary section containing various tables and other data of considerable value.

The main text is arranged alphabetically according to therapeutic indications. Therapeutically, the volume has much valuable information and a fair minimum of unnecessary matter. Typographical errors are rare. In addition to the prescriptions there are in many instances discussions that very materially increase the usefulness of the book to the busy physician. For example, under syphilis such discussion takes up about seven pages of the text. In the way of a mild criticism, we might mention that prescription are given in Latin with complete terminations. In many instances this could not be copied "as is" on a prescription blank. It might, therefore, be more useful to the physician if the prescriptions were abbreviated as they would have to be written in every day practice. The same suggestion would apply to the directions, which in many instances are too long to be copied on a prescription blank or placed on a label.

We believe this little volume will fill a useful purpose in the library or on the desk of a busy practitioner.

O. W. BETHEA, M. D.

Minor Surgery of the Urinary Tract: By Herman C. Bumpus, Jr., Ph. B., M. D., M. S., F. A. C. S., John L. Crenshaw, M. D., and Anson L. Clark, M. E., M. D. Philadelphia, W. B. Saunders Co. 1932. pp. 116.

The authors present more of a compend of the contents of which one conversant with urological procedures should be well informed.

I do not feel that they should include trans-urethral surgery of the prostate in this text as a minor surgical procedure, nor should cocaine be mentioned for instillation into the urethra when there are so many other much less toxic drugs available for local application.

MONROE WOLF, M. D.

Researches on Blackwater Fever in Southern Rhodesia: By G. R. Ross, M. B., Ch. B., Ph. D., D. P. H. London, London School of Hygiene and Tropical Medicine. 1932. pp. 262. Price, \$1.75.

This excellent monograph upon blackwater fever as it occurs in Southern Rhodesia considers the subject in a general manner under the headings of topography and development of Southern Rhodesia, the distribution of blackwater fever in Southern Rhodesia, the seasonal incidence and local distribution of blackwater fever and its correlation with meteorological conditions in Southern Rhodesia, the association between malaria and blackwater fever in this country and quinine as an exciting cause of the disease. The work is a continuation of the work by Thomson who studied this disease in Rhodesia in 1922 and 1923 and the conclusions support those of Thomson as regards the etiology of the disease.

While the author does not claim to have solved the etiology of blackwater fever he concludes that so far as Southern Rhodesia is concerned the relationship between malaria and blackwater fever must be regarded as adding considerable weight to the argument that blackwater fever is a manifestation of infection with plasmodium falciparum, the cause of malignant tertian malaria. He admits that the relative effect of chronic malaria in the native inhabitants and in the nonimmune immigrants appears paradoxical and states that there is much room for further inquiry as regards the influence of treatment in both cases. The influence of quinine in producing a condition rendering the individual susceptible to blackwater fever he states is not decided and requires further observation. He states that his work supports the conclusions reached by Leishman, Deeks and James, Stevens, Thomson and others that blackwater fever is a manifesta-

tion of malarial toxicity and that the position of quinine as a cause of blackwater fever remains unsolved and that much remains to be done before the solution is reached.

The author's observations upon the blood and urine in blackwater are most valuable and thorough and the entire work evidences an enormous amount of well-directed labor. The author is to be congratulated on this excellent monograph which should be in the library of all those interested in the subject of blackwater fever.

CHARLES F. CRAIG, M. D.

An Experimental and Clinical Study of Pain in the Pleura, Pericardium and Peritoneum: By Joseph A. Capps, M. D. New York, The Macmillan Company. 1932. pp. 99. Price, \$3.00.

This excellent Macmillan medical monograph brings to our attention clearly, concisely, and tersely, valuable clinical information concerning referred pain gleaned over a period of twenty years.

All these studies were carried out upon human beings, the sensitiveness and paths of pain conduction of the pleura, pericardium and peritoneum being determined in a very clear and novel manner. Exploratory taps of these serous cavities were followed by the introduction of a long silver wire through the trocar. By this means the walls of these cavities were stimulated by pressure and scratching and the points and character of pain complained of by the patient accurately noted. All such experiments were carried out under only ethyl chloride anesthesia of the skin.

The pleura, pericardium and peritoneum are considered in this order. Definite case histories are given, the method of procedure and the results. Diaphragmatic pleurisy is considered especially. At the conclusion of each section the results are summarized very clearly and definitely.

This monograph is very illuminating and should be of considerable value to anyone wishing to secure a clarification of ideas concerning the pain produced in inflammatory conditions of these serous cavities. The value of such information in differential diagnosis is very evident.

WILLARD R. WIRTH, M. D.

Principles of Preoperative and Postoperative Treatment: By R. A. Cutting, M. D. New York, Paul B. Hoeber. 1932. pp. 812.

It is generally conceded that preoperative and postoperative care of the surgical patient is as important in many instances as the actual operation itself. There has been a paucity of literature directing special attention to these phases of surgical problems. There was actual need for such a volume as this. The author has set forth the general principles involved in the proper care of the patient before and after operation. The book

is not a guide to an acceptable routine for a surgical service, but rather a statement of principles, permitting a variety of methods, with frequent quotations from the literature of the opinions of men experienced in the particular subject under discussion. Especially good are the chapters on "Disturbances of Acid-Base Equilibrium" and "Abdominal Distention and Gas Pains."

The author writes exceptionally well. His style is facile and clear, making the book a pleasure to read. It is a sizable volume of eight hundred and twelve pages, adequately illustrated, nicely bound, and well printed. There are but few typographical errors.

HOWARD R. MAHORN, M. D.

Plastic Surgery of the Nose, Ear and Face:
By Victor Fruhwald. Vienna, Wilhelm Mau-
drich. 1932. pp. 86. Price, \$4.00.

One naturally expects outstanding contributions from our Vienna confreres. In this short text book, well filled with highly useful information along lines of technic, our expectations are realized. Profusely illustrated with original drawings. The author has generously acknowledged in words, and by giving complete operative procedures, our country's contribution to this field of plastic surgery. In such work there is always a lurking danger of adding to the disfigurement. Our cosmetic success depends upon many technical refinements. Fruhwald brings out all the essential points for the attainment of this cosmetic objective. This meritorious work, dedicated to "My foreign friends and colleagues," must prove a ready source of reference.

HOMER DUPUY, M. D.

The Heart Rate: By Ernest P. Boas, M. D., and
Ernst F. Goldschmidt, Ph. D. Baltimore,
Charles C. Thomas. 1932. pp. 166.

This monograph is based on observations obtained through the use of the cardiometer, an instrument first described by one of the authors, E. P. Boas, and recently improved with the aid of Drs. Goldschmidt and Liebowitz.

The data presented is based on a survey of 356 patients, some of whose heart rates were recorded over a 12-24 hour period. These findings are divided into two sections: a study of the normal heart rate and its variations as the first part and observations on the more important alterations in heart rate in the clinic as the second part. This latter section describes the heart rate during various operations, sleep, intercourse, internal diseases, and other conditions.

This treatise is most worthy and represents original work carried out in an original manner, *i. e.*, through the method of cardiometry. The

only adverse comment to be made is that the conclusions are based on a relatively small series. This failing is in part compensated for by the accurate work-up of the cases presented, thus eliminating possible errors. The statistics are presented in a concise, clear manner and are enhanced by many graphs and charts.

A most complete biography is presented.

SIDNEY M. COPLAND, M. D.

Nursing Services and Insurance for Medical Care in Brattleboro, Vermont: By Allon Peebles, Ph. D., and Valeria D. McDermott. Chicago, University of Chicago Press. 1932. pp. 65. Price, \$0.60.

In this publication of the Committee on the Costs of Medical Care the study is made of nursing service and insurance in a medium sized city in Vermont. As with the problem of medical service, the authors conclude that there is no one solution of the problem of the nursing service adequate for any nursing need in every community.

J. H. MUSSER, M. D.

PUBLICATIONS RECEIVED.

F. A. Davis Company, Philadelphia: Essentials of Pediatric Nursing, by Ruth Alice Perkins, R. N., B. S. Nursing in Nervous Diseases, by James W. McConnell, M. D.

Lea & Febiger, Philadelphia: Diabetes in Childhood and Adolescence, by Priscilla White, M. D.

Charles C. Thomas, Springfield: Fungous Diseases, by Harry P. Jacobson, M. D. Classic Description of Disease, by Ralph H. Major.

P. Blakiston's Son & Co., Inc., Philadelphia: Recent Advances in Anesthesia and Analgesia, by C. Langton Hewer.

Oxford University Press, New York: The Anatomy of the Human Orbit, by Ernest Whinnall, M. A., M. D. The Use of Lipiodol, by J. A. Sicard and J. Forestier. Individuality of the Blood, by Leone Lattes.

J. P. Lippincott Co., Philadelphia: Functional disturbances of the Heart, by Harlow Brooks, M. D.

The University of Chicago Press, Chicago: The Medical Service of the Homestake Mining Company, by Louis S. Reed, Ph. D. Nursing Services and Insurance for Medical Care in Brattleboro, Vermont, by Allon Peebles, Ph. D., and Valeria D. McDermott.

National Bureau of Economic Research, Inc., New York: The Purchase of Medical Care Through Fixed Periodic Payment, by Pierce Williams.

London School of Hygiene and Tropical Medicine, London, W. C. I.: Researches on Blackwater Fever in Southern Rhodesia, by G. R. Ross, M. B., Ch. B., Ph. D., D. P. H.

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STERILITY IN WOMEN* INCLUDING ITS SURGICAL ASPECTS

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AND

EUGENIA B. DABNEY, M. S.,

BIRMINGHAM, ALA.

Two tragedies often encountered by the physician in the same day and hour are, on the one hand, the couple who are unable to have an offspring and the other, the pair determined to end a pregnancy by abortion.

Until recent years the study of a childless couple consisted largely of a pelvic examination of the wife and an examination of a condom specimen of the husband, to determine the presence or absence of viable spermatozoa. From these two useful but wholly inadequate procedures an opinion was formed, a prognosis given, and usually, and unfortunately, a curettage of the woman was undertaken. Today, a sterility study is far from a simple problem. But of late years new light has been shed upon the subject which has greatly increased our diagnostic and prognostic ability, and to some extent our therapeutics. Certainly a great deal of helpful data may be obtained from a careful study both of the husband and the wife. I shall not attempt a complete review of the subject, but shall merely emphasize a few points of interest.

While this paper will deal with the female

side of sterility, it does not minimize the importance of the male responsibility.

DIAGNOSIS

A careful history and physical examination are obtained from husband and wife, and consultation with a competent urologist is often held if spermatozoa are not found at all, or are dead, or are few in number and sluggish in movement as studied in a condom specimen.

Besides the routine data comprising any good history, one wishes to pay especial attention to the history of familial fecundity, the patient's occupation, traumas, operations, general diseases, general resistance and reactions to diseases, the food likes and dislikes, exercise, amount of exposure to sunlight, venereal diseases, and the sexual life past and present, including the patient's knowledge of sex hygiene. The number of childless marriages is variously estimated, but one in every ten is the usual figure given.

Forsdyke, and Mazer and Hoffman¹ consider male responsibility for sterility about 25 per cent, while Meaker thinks 33 1/3 per cent of causative factors are on the male side.

PLURALITY OF CAUSES

As a matter of fact, as Meaker² so truly states, there is nearly always a plurality of causes. In none of his series did he find less than two contributing factors; the greatest number was seven; and the average number of possible causes in the study of sterile couples was four and a half. He thinks the responsibility is divided between husband and wife in at least 90 per cent of

*Read before the Section on Surgery at the Sixty-fifth Annual Session of the Mississippi State Medical Association, Jackson, April 13, 1932.

instances. Therefore, the problem is one of a combination of factors and not of a single one.

GENERAL CAUSES

It is a well known fact that severe chronic diseases may lower the threshold of fertility to the level of sterility. Advanced tuberculosis, extreme anemia, lead poisoning, etc., are but some of them. However, all of us have seen active tuberculosis, syphilis, carcinoma, etc., in pregnant women.

MALDEVELOPMENTS

The absence of essential organs of reproduction, such as ovaries or uterus, offers no difficulty in diagnosis, but the size of the uterus and ovaries varies so much that one is often in doubt as to the exact borderline between an infantile uterus, for example, and a normally small one. Certain it is that most of us have seen what we had formerly considered an infantile uterus become pregnant. In this connection Hellman³ says: "If the intravaginal portion is definitely as large as the intra-abdominal portion, we have a true infantile uterus, and conception can not occur."

ENDOCRINES

Persons with marked myxedema or acromegaly are habitually sterile; but there are many intermediate degrees of endocrine deficiencies and hyperactivity that are not so readily recognized.

Briefly, the present theory of the physiology of menstruation and pregnancy, which has changed enormously in the past three years, is as follows:

1. A hormone of the anterior pituitary gland (prolan A) stimulates the ovary to form follicles and liberate ova. With this hormone, ovulation may be induced at any time of the year in lower forms which ordinarily breed only in the spring. Superfetation, and ovulation during pregnancy may also be produced. Without prolan A, no ova can be formed. Hence, there is total sterility.

2. Estrin, which brings on rutting in animals and induces copulation, is liberated with the development of the graafian

follicle. It probably stimulates the formation of secretions which facilitate the passage of the sperm cell into the uterus and tubes.

3. Prolan B, a second hormone from the anterior pituitary, then stimulates the formation of the corpus luteum.

4. The corpus luteum secretes progesterin, which sensitizes the uterine lining, and maintains the nutrition of the embryo during pregnancy.

Thus, hormone 1 produces the egg; 2 secures access to it of the sperm cell; 3 stimulates, and 4 prepares the nest and maintains the nutrition of the embryo. The stimulus travels in zigzags from the anterior pituitary to the ovary, back to the pituitary and again to the ovary. Menstruation results each time that this succession fails to produce a pregnancy. If the ovum is fertilized, the corpus luteum persists with its secretion, throughout gestation, and the secretion of the anterior pituitary is diverted to the urine, its presence there in large quantities being the basis for the Aschheim-Zondek pregnancy test, and its many modifications.

Graves states that an enormous volume of physiological studies of the hormones of the pituitary and the ovary has resulted in very little of clinical value; that the mountain seems to have labored and mourned most grievously, and has given birth to nothing but a mouse.

To this, one can only answer as a great physicist of the Nineteenth Century is said to have answered Gladstone. Faraday was showing Gladstone an induction coil, whose principal later made possible the electric dynamo with its countless gifts to industry. Gladstone was a little bored. "Of what use is it?", he asked. "Some day, Sir," replied Faraday, "you may be able to tax it."

Where physiology leads, medicine is sure to follow; and in the not too distant future, sterility will profit greatly by studies of the physiological effects of the sex hormones.

DIETARY DEFICIENCIES

Evans' work on vitamin E, Macomber and Reynolds' investigations along the same

line, and an extensive literature since then shows very clearly that in laboratory animals there is a definite and marked relationship between vitamin deficiencies and fertility. All the vitamins seem to play some part directly or indirectly in gestation though our knowledge of some exceeds that of others. Mineral elements are just as important.

At the present time there is more hope from treating endocrine sterilities with dietary measures than with hormones. A number of different specific types of dietary sterility have been produced experimentally; and the endocrines are greatly stimulated by various food deficiencies. Vitamins and endocrines are doubtless closely interrelated.

In the absence of iodine, the thyroid enlarges. In the absence of vitamin D, the parathyroids enlarge.

Summarizing the specific effects of vitamin privation upon reproduction in animals, we find:

In the absence of vitamin A, the fertilized ovum fails to be implanted in the uterus. Without prolactin B (an anterior pituitary hormone) it also fails of implantation.

Large quantities of vitamin B are necessary for gestation and lactation. In the male with beriberi it is noted that motile spermatozoa are produced, but that the prostate and seminal vesicles have an abnormal histological structure which shows that the male hormone, testiculin, is not being produced. From analogy it might be surmised that the female sex hormone, estrin, is similarly lacking following an extreme vitamin B deficient diet.

Vitamins C and D are closely related to the metabolism of calcium; and large quantities of calcium must be mobilized in pregnancy. Vitamin D is also intimately related to parathyroid function.

E is called the fertility vitamin, as it is necessary for reproduction in males and females. In its absence the fertilized ovum can become implanted but is resorbed. It will be recalled that nutrition of the

embryo depends upon the ovarian hormone, progesterin. The writer was inclined to relate the two together till informed by a distinguished anatomist that the histological pictures of resorption in the two conditions are entirely different. However, the effect of discontinuance of pregnancy is the same.

It has been shown that complete removal from the diet of the element manganese, which is normally present in foods merely as a trace, will result in perfectly healthy looking male and female adult rats. However, the males are found to be completely sterile. The females, if mated to normal males, bear offspring which practically never survive. The female mammary glands also fail to function.

This is merely to mention a type of experimental dietary deficiency which produces a female animal of normal appearance with defective ova.

It may be mentioned that regular, normal menstruation can occur without production of ova. Merely the fact that a woman menstruates does not prove that she has ovulated.

VAGINAL ACIDITY

The normal acid reaction of the vagina must exist for a purpose. But for many years it has been claimed to have a deleterious effect upon semen in some cases. Consequently, a sort of arbitrary rule was evolved, namely, to prescribe a sodium bicarbonate douche for sterile women just prior to coitus.

Mason,⁴ of Denver, in 1929, noted that the concentration of spermatozoa was much greater in numbers in the external os and in that immediate vicinity than elsewhere in the vagina. The apparent cause he seems to have discovered by adding a drop of vaginal secretion to a specimen of semen, when he observed that it stimulated the spermatozoa which tried to move away from the acid vaginal secretion into the more alkaline medium of the semen. That is, all the active sperms moved away, leaving only a few relatively inactive stragglers behind. A still smaller number swam

into the acid secretion itself. For the first time a logical explanation was evolved of the normal migration of spermatozoa toward the cervical os, from the acid vaginal vault toward an alkaline medium. He concludes, therefore, that it is not so wise a plan to order a pre-coital alkaline douche.

To hear from the other side, we may quote from Loomis,⁵ of California: "The statement that the alkaline douche is unnecessary because of the alkalinity of the semen, is plainly refuted by the fact that 60 per cent of patients whose reaction was tested after coitus, no douche being used, were still acid; and also by the fact that in several instances only dead spermatozoa were seen until coitus was preceded by an alkaline douche, after which normal motility was found."

CERVICAL LESIONS

Cervical ectropion with or without lacerations of the cervix, endocervical infections, and stenosis of the os, constitute the chief lesions of the cervix detrimental to conception. According to Polak⁶ endocervicitis accounts for 75 per cent of sterility in women. These lesions are all easily diagnosed but the chief test of their harm is that of Huhner. The patient reports within one hour, if possible, after coitus, a specimen of the cervical secretion is removed and examined with a scope for an ample number of viable and actively motile spermatozoa. If they are not found and if a condom specimen shows the husband to be all right in that respect, one thinks of a toxic condition of the cervix, often due to chronic infection. An acid reaction of the cervical canal also is a hindrance.

The worst cervical condition is that of a plug of a tough, tenacious character which has been spoken of as "tanglefoot." Obviously no upward progress of the spermatozoa can be made through such a barrier. It is one of the chief causes of sterility.

The interesting work of Kurzrok and Miller⁷ of Columbia University, in 1929,

shows that normal semen contains an enzyme that digests the mucus of the os under ordinary circumstances.

TUBAL LESIONS

Obstruction somewhere along the course of the fallopian tube causes 35 to 40 per cent of female sterility, according to Hunner and Wharton.⁸ The obstruction varies all the way from a light so-called agglutination of the mucous membrane lining the tubes, to dense scar tissue obliterating the lumen, or adhesions closing the fimbriated ends. Gonorrhea takes first place among the causes, followed by infections from abortions, from childbirth, from the gravitation of pus from appendicitis, and rarely from tuberculosis of the tubes. Gonorrhea produces more harm to the endosalpinx while puerperal infections are prone to cause much perisalpingitis.

RETRODISPLACEMENTS OF THE UTERUS

Many of us can recall when every retrodisplacement of the uterus was considered pathological. We now know that a considerable percentage of women have congenital retrodisplacements and others acquire the condition following childbirth, without suffering any physical discomfort, provided there is no complication such as a chronic inflammatory disease in the pelvis or an over-stretched or lacerated perineum. On the other hand, there seem to be four conditions under which retrodisplacement may prevent conception:

(1). When there is a short anterior vaginal wall the cervix may be pulled up well out of the seminal pool so that few or no spermatozoa can gain access to the os. This can be determined by the Huhner test, i. e., by microscopic examination of the cervical secretion within one hour after coitus and looking for spermatozoa.

(2). In retrodisplacement associated with a relaxed vaginal outlet and prolapsus, where the os lies at or near the introitus, it is possible for the os again to lie well beyond the seminal pool.

(3). In some cases of acquired retrodisplacement, the malposition may cause a kinking of the tubes sufficient to prevent

the passage of gas during insufflation or of oil during the lipiodol test (Forsdyke).

(4). In a rare condition known as effluvium seminis, the vaginal outlet is dilated and the semen rapidly flows out (Huhner). This is benefited by having the patient place a pillow under her buttocks during coitus and lie in that position upon her back for some time afterward.

One should be slow to blame retrodisplacement as the cause of sterility. If all other factors can be ruled out in husband and wife, and if the uterus can be held forward with a vaginal pessary, there is no reason why it should not be tried. The writer has occasionally seen conception follow soon enough after correction of retrodisplacement by a pessary, to make it appear to be the cause beyond any reasonable doubt.

FIBROIDS

One woman in four who has reached twenty-one will be found to show fibroids of the uterus if that organ is seriously sectioned; and 40 per cent of women at the age of forty or over will show the same thing, according to Polak. This does not mean that all the tumors are of palpable size clinically or that all are producing any symptoms.

Lynch⁹ states that:

"Sterility is said to exist in approximately 30 per cent of married women with fibroids. * * * Only 169 of the 215 fibroid cases in the married women of my series had had children, a sterility of 31.8 per cent.

"The above shows that there is twice as much sterility in fibroids in married women as is found in married women in general who have been under medical care."

The common belief that submucous fibroids are the usual type in sterility would seem refuted by Goetze (quoted by Lynch⁹) who found 91 per cent of his submucous fibroid cases had borne children. The greatest number of cases were of the interstitial and subserous varieties (Schorter, Young and Williams, and Goetze⁹).

Lynch believes that sterility is occasionally caused by fibroids and by retrodisplacements, but that the underlying cause in both

instances is congenital and developmental in origin.

THE RUBIN TEST

As helpful as was the introduction of the Rubin transuterine insufflation test in the diagnosis of tubal spasm, stenosis, and occlusion, the writer finds himself using it less and less, in favor of lipiodol. With us its chief indications now are: (1) for patency tests in those unable to afford the cost of roentgen ray films that are necessary in connection with lipiodol injections; and (2) for re-opening tubes that have been opened before—in other words, for treatments.

LIPIODOL TEST

Instead of describing this well known and useful procedure, I shall mention some variations from the usual technic which seem to be improvements:

(1). Use a single or double Sims instead of a bivalve speculum, as the latter may cast a roentgen ray shadow over part of the uterine canal if the cervix is drawn downward as it should be. The Sims can be removed before the pictures are taken.

(2). Use two tenaculum forceps instead of one.

(3). Fasten the tenacula transversely in the upper and lower lips of cervix so as not to encroach upon the lumen of the cervical canal when the uterine cannula is introduced. A more efficient stoppering effect is thus accomplished.

(4) Pull downward upon the tenacula to keep the uterus more or less in the midline, and to prevent its superimposition upon a tube as sometimes is the case when one unconsciously pushes the uterus upward into the pelvis in an effort to keep the cannula snug in the uterine canal.

(5) Do not remove the cannula after the first films are taken. Instead of having the patient return the next day for re-ray-ing in doubtful cases to determine whether or not the oil has escaped into the pelvic cavity, this plan usually works: With the cannula still in place as a sort of stopper, have the patient slide down to the end of the table where the tenacula and cannula can be lowered, and have her sit upright.

She should alternately draw the lower abdomen inward and push it outward, and strain and relax to churn-up the pelvic contents and scatter any of the overflow oil. Another picture is then made when she lies down.

TREATMENT

General.—Both husband and wife should be given such general and hygienic advice as is needed for increasing their health. This should include the correction of malnutrition and dietary deficiencies, the reduction of the obese, attention to exercise and the securing of ample sunlight, the removal of infections of the teeth and tonsils, etc. Thyroid extract should be given to those who show a lowered basal metabolic rate.

Cervical.—A stenotic cervical canal will usually be diagnosed when the Rubin or lipiodol test is being performed; and unless it is very marked may be dilated with sounds at that time. A preliminary hypodermic is usually all that is required. However, one sometimes has to use a general anesthesia to do a satisfactory stretching.

The tenacious mucus plug often found in the cervix of sterile women is difficult to overcome. Topical applications of antiseptics will sometimes alter its consistency very satisfactorily. In others, where the canal is amply large, stellate cauterization will do the work. There will remain some that no form of treatment will cure.

Tubal.—Fortunately the tubal insufflation method of Rubin and the lipiodol injections for hysterosalpingography are also followed within the next few months by a certain number of pregnancies. Five of the writer's successful cases followed these procedures.

Many tubes thus opened by gas or oil are thought to have an agglutination of the mucous membrane folds, while other instances may represent mucous plugs that are moved along just as one blows out a pipe stem. It is believed that in some cases even fine adhesions at the fimbria may be broken down long enough for the

ovum to descend into the tube and unite with a spermatozoon.

Artificial Insemination.—Artificial insemination has always captivated the popular fancy. Meaker¹⁰ states that it was successfully carried out by the Arabians with mares as far back as 1322; that fish eggs were artificially fertilized in 1700; and that Spallanzani impregnated bitches in that manner in 1780.

Not only does the Government use this practice in its Department of Fisheries, but breeders of high grade cattle employ the same means to conserve the valuable gametes of high bred sires.

In the last century and a half, interest in artificial insemination was revived by the successful work of John Hunter, who in 1799 injected the semen of a patient suffering with hypospadias into the upper vagina of the wife, with success.

J. Marion Sims, in 1866 was the first to produce successful artificial insemination in a human being by intra-uterine injection. In the five other cases in which he attempted it, he failed. It would seem indicated in couples showing normal spermatozoa and patent tubes, in cases with toxic cervical secretions, or with tenacious mucous plugs, in cervixes too small for stellate cauterization, which have resisted topical applications and dilatations, and which show no active infection. In each instance the patient should be apprised of the fact that infection is a risk somewhat greater than the average woman runs in having a baby through natural processes.

The writer has had no personal experience with this method of treatment, for the cases in whom it seemed indicated refused it, and those who requested it did not seem suitable subjects.

OPERATIVE STERILITY

Surgery in general in sterility occupies a distinctly subordinate place to dietary, hygienic and mechanical measures in therapy. However, certain conditions render a woman totally and permanently sterile unless surgery can effect a cure. Maternal instinct is so strong that a woman will oft-

en assume a certain risk in the hope of bearing an offspring.

Although pregnancy occasionally follows the removal of a unilateral ovarian cyst, or the enucleation of a fibroid, it is probable that the helpful effect is the improvement in the general health that has been brought about and is not due to any specific effect upon the reproductive organs.

Operations for suspension of the uterus, which are rarely called for in sterility, require no special comment other than that some method should be selected that will leave free the muscular uterine ends of the round ligaments which are necessary for hypertrophy and elongation during pregnancy. For all practical purposes, the surgery of female sterility is limited to the cervix and to the tubes, the results of the former being much more fruitful than the latter.

The Cervix.—For some time it has been observed that few pregnancies followed trachelorrhaphy. Any one who has performed many Sturmdorf apple-core operations for chronic edocervicitis has also felt chagrined at the high percentage of resulting sterility. Consequently, one is forced to the conclusion that any plastic operation upon the cervix, particularly one which shortens the distance between the external and internal os, will militate against future pregnancies.

Some type of electric cautery, such as the Post, is most useful for removing ectropion of the cervix or for a stellate cauterization of the cervical canal in stubborn endocervicitis associated with a tenacious mucous plug which has resisted topical application of antiseptics. Under no circumstances should one cauterize the canal when it is small, as some contraction always follows every cauterization and this may be productive of dysmenorrhea, and the stenosis may aggravate the sterility. The only thing left for a very small os other than dilatation is artificial insemination in selected cases.

Stenosis of the os is commonly diagnosed but in the writer's experience is relatively

rare. It does exist in a small per cent of cases, but should never be diagnosed by guesswork.

The Fallopian Tubes.—It is now very generally recognized that the nearer the occlusion of the fallopian tube lies to its fimbriated end, the more operable it becomes. Those situated in the isthmus are not operable for purely mechanical reasons. The ideal type for operation is that resulting in an enlarged bulbous tip very much as though a purse string suture had closed it. The best procedure is not to tease an opening in the end, but to do a salpingostomy by making a clean, sharp, tangential cut, removing a sort of elliptical cap or lid. Then the peritoneal layer is united to the mucous layer with six or eight interrupted sutures of the finest silk obtainable, on the smallest needle to be had. These should be cut short just distal to the knots. Catgut is not desirable because it must be absorbed and this process causes a congestion which will invite the attachment of omentum or intestines, whereas silk is not absorbed and is well tolerated without reaction by all clean tissues of the body. Too many sutures mean added needle pricks and further invitation to adhesions. Wherever possible attempt should be made to draw the peritoneal layer inward to the mucous membrane as in that way the line of union will be further removed from the ubiquitous omentum. This is contrary to prevailing practice.

It is needless to say that no such plastic operation should be attempted upon a tube unless there be at least one good ovary. By good is meant one that has not practically its entire surface raw where it has been freed from dense adhesions. In such a case we may rest assured it will become buried and plastered down by the first movable organ with which it comes in contact; and no ova can escape to reach the tubal opening.

We now come to the most important part of the operation of salpingostomy, namely, the other and main means of preventing the formation of adhesions at the site of oper-

ation. It is by far the most important point in this paper. We all think we are gentle surgeons, respectful of all tissues and ever alert to produce no trauma. This may be true, but salpingostomy requires not a super-knowledge or a super-skill, but it most certainly does require infinite patience and a different sort of gentleness from that employed in thyroidectomy, mastectomy, cholecystectomy, appendicectomy, etc.

Remembering that the operation rarely succeeds because of adhesions, how can we lessen them in every possible way?

First, by beginning with the anesthetic. A perfect relaxation and a large incision are necessary to obviate the necessity of any packs or gauze sponges in the abdomen to hold back the viscera from the field. Spinal anesthesia in suitable cases is probably the most ideal. Very deep ether narcosis, with the Trendelenburg position, and the assistant's hand to push back the intestines from the region of the tube, will also suffice. Gas will rarely answer the requirements due to the poor relaxation and great straining. No gauze sponges should be employed. Instead, cotton pledgets wrung out of saline solution, should be used exclusively and then only sparingly, to blot and not to wipe. The most harmful trait of an assistant is a zealous hyperneatness that makes him wipe away every speck of blood from a peritoneal surface and polish it each time he does so. Every stroke of the gauze sponge removes myriads of the covering cells which leaves a raw surface sure to result in adhesions.

The tubes should not be picked up with clamps, dressing forceps, or sponge holders. They should be gently lifted by the fingers of the operator or an assistant.

Unless the above technic, or some effective substitute, can be carried out, it is far better to refrain from the operation of salpingostomy.

In reviewing the literature on salpingostomy, there was usually much pessimism encountered. Many men of wide teaching experience and extensive surgical practice

are frank to state that they have never had a case that subsequently became pregnant. In hopeful contrast to that, however, one finds Kerwin¹¹, of St. Louis, reporting 50 cases, 28 of whom answered questionnaires and reported seven as successful. One of the women had twins. That makes 25 per cent successful from those who could be traced.

In discussing Kerwin's paper, the late Dr. Polak, of New York, reported 51 salpingostomies with 7 patients who bore 10 babies.

CONCLUSIONS

Diet and general hygiene are of great importance in the treatment of sterility.

Further clinical advancements in endocrine treatment of sterility are to be expected when the preparations now in use in physiological laboratories become available to the general medical profession.

The local and operative measures of value in the treatment of sterility have been reviewed.

Several new points in the technic of the lipiodol test and in salpingostomy are given.

It is believed that salpingostomy properly performed is worthy of more frequent trial.

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INDUCTION OF LABOR WITH CASTOR OIL, QUININE AND PUNCTURE OF THE MEMBRANES.*

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NEW ORLEANS.

Indications for the artificial termination of pregnancy, after the child has reached the period of viability, occur very frequently in obstetrics. In the severer forms of toxemias it is usually evident that such a procedure is necessary. In other cases it remains a question to be decided according to the progress and course of the complicating factor. The method used should be one of simple technic that gives quick results and should not be injurious to mother or child, and, if possible, no anesthetic should be used.

The more important indications for such a procedure shall be discussed very briefly. The toxemias are, by far, the most important and most frequent conditions necessitating interference. In mild cases it is permissible to temporize with medical treatment such as elimination, sedation, free fluids and diet. This, only if the condition of the patient remains the same or improves. However, in the more severe types of toxemia, and especially eclampsia, it becomes evident that interruption of the pregnancy is essential. Post-maturity of the fetus is another important indication. It cannot be considered wise to allow a patient to continue her pregnancy two or three weeks past term, when the fetus is definitely fully mature as shown by palpation and according to measurements. There would be danger of intra-cranial hemorrhage and dystocia due to difficult molding of firm cranial bones. Rotation, if the case is originally one of posterior position, would be prolonged and, at times, require intervention with forceps. In our series labor was induced for either toxemia or post-maturity of the fetus. There are other indications

that do not enter into the scope of this paper. Such are contracted pelvis (in the hope that a premature baby will lessen the incidence of dystocia), hydramnios, death of the fetus, premature labor for cases with habitual death of the fetus at term, constitutional diseases and others of rarer occurrence.

There are several methods in popular use today for induction of labor. They are divided into operative and non-operative. The operative methods consist of (1) Introduction of catheters into the uterus. (2) Insertion of a bag inside the cervix. (3) Puncture of the membranes and (4) Packing of the cervix and vagina with gauze. The last, we do not employ at all. Catheters were used before we began the use of castor oil, quinine and puncture of the membranes. There are 10 cases of these for comparison which shall be taken up later; also accompanying slides of roentgenograms of some showing the position of the catheters in utero. The bag, either deRibes or Voorhies, is a very efficient means of inducing labor, accomplishing this by irritating the uterus. It has, however, its disadvantages. First of all more manipulation and consequently more trauma is necessary in its introduction, thereby affording the possibility of infection. Furthermore a general anesthetic is necessary as a rule. Again there is the possibility of prolapse of the cord or malposition because of the displacement of the presenting parts. The drugs used in the non-operative procedures are castor oil, quinine and pituitrin. There may be either used in the form of Watson's method combining the three according to a definite regime, or in Hofbauer's method which consists of this combination with intra-nasal administration of pituitrin. The latter is used for slower action of the drug, and may be discontinued at any time. Again medical induction can be combined with some operative method such as puncture of the membranes. This was done in our cases.

Guttmacher and Douglass of Johns-Hopkins reported a series of cases in which this combined method was employed. They used

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three variations, the first consisting of castor oil, quinine, puncture of the membranes and pituitrin intra-nasally, the second without pituitrin, and third only puncture of the membranes. No appreciable difference was noted between the time of puncture of the membranes and the onset of labor pains in the cases with and without pituitrin. There was a definite difference, however, in the cases in which only puncture of the membranes was carried out. In these, the interval was lengthened considerably. They also found that this interval period was shorter in primiparae than in multiparae, the latter being 4.2 hours and the former, 2.5 hours. The average duration of labor in multiparae was 7.13 hours and in primiparae 10.08 hours.

Mathieu in a recent article reports the use of the following technic: Castor oil 2 oz. Two hours later a hot S. S. enema. As the enema is being expelled three minims of pituitary extract is given, and this is repeated every half hour until labor begins or until 15 doses have been administered. If this fails he repeats the same routine within 24 to 48 hours. Originally he had used quinine along with this. Later, he discontinued its use with no appreciable difference in results. He reports 96.6 per cent success with this method, but he considers a case as successful with more than one trial. In his series, the average duration of labor in primiparae was 11.1 hours, in multiparae 4.5 hours. There were no fetal deaths except those that were macerated, one from eclampsia, and another from strangulation of the cord.

Fitzgibbon of Dublin has also recently reported a series of 23 cases in which he punctured the membranes to induce labor. Castor oil, quinine and pituitrin were not used. No ill effects to mother or baby were noted. He also found that primiparae started labor quicker than multiparae. His results compare with those of Guttmacher and Douglass in the series of cases in which they used only rupture of the membranes,

excepting the average duration of labor which was about twice as long.

The technic used in our cases is not original. It is that advocated by Guttmacher and Douglass. There was no variation and no selection of cases according to parity, position, indication or state of gestation. It is as follows: castor oil one oz. and quinine gr. X. One hour later the quinine is repeated. One hour following this the quinine is again repeated with an S. S. enema. Two hours after the enema the membranes are punctured. An Ochsner forceps is usually used for this after dilating the cervix manually up to one or two fingers dilatation. None of the cases were over two fingers dilated. This was carried out under strict aseptic precautions. There are 20 cases in the series. This number, although small, has brought out several facts rather convincingly. Of the 20 cases there were 5 primiparae and 15 multiparae, varying from the first to the ninth pregnancy. The ages varied from 17 years to 38 years. The interval between puncture of membranes and the onset of labor varied from almost immediately to 21 hours. The average in primiparae was 8.2 hours, in multiparae 3.06 hours. The average time in all cases was 5.62 hours. The immediate results are believed to be due to sensitization of the uterus by castor oil and quinine. The duration of labor was very interesting. It was apparently shortened in the majority of cases, shorter than would be expected if this particular procedure had not been carried out. The shortest duration being less than 1 hour, the longest 24 hours. The latter was a primipara who did not have strong pains at any time. Another patient began labor 2 hours after puncture of the membranes, and was delivered of an impacted breech 24 hours later. One case was delivered with mid-forceps after being in labor 17 hours. This was the only forceps case. Version and extraction was done in a case having prolapse of the hand who had been in labor for some time. The average dura-

tion of labor in primiparae was 12.6 hours and multiparae 10.4 hours, the average in all cases was 11.91 hours. There was one failure after 24 hours. This was an eclamptic patient 6½ months pregnant. A bag was used later. It is of general opinion that the method is not so efficient in cases earlier than the seventh month. This particular case would apparently bear that out. There were two still births in the series; the above case which was already dead, and another patient who was delivered of a macerated fetus. All babies, with the exception of three, weighed over 6 lbs. Four babies weighed over 8 lbs. As to the position 15 cases were either L. O. A. or R. O. A., two cases were occipito-posterior. One was a breech; and in another the hand was prolapsed. One case was undetermined. The incidence of fever during the postpartal period is very important because it might be thought that puncture of the membranes predisposes to infection. However, of the 20 cases, all were considered as afebrile with the exception of three. Two of these definitely had pyelitis, and the other was due to eclampsia. Cases were considered as febrile when the temperature reached 100.4° on two occasions, not counting the day of delivery.

In a comparison of our series with that of Guttmacher and Douglass, whose technic we have followed, we find that the interval between the time of puncture of the membranes and the onset of labor is longer in primiparae. This is contrary to their findings. But the average time for all cases is somewhat similar, theirs being 3.42 hours and ours 5.62 hours. This is much shorter than the cases in which they employed only puncture of the membranes and the series by Fitzgibbon. The figures being 10.05 and 11.8 hours, respectively. A comparison of the duration of labor in all cases in the several series is as follows:

Guttmacher and Douglass.....	8.47 hours
Mathieu	7.80 hours
Fitzgibbon	20.3 hours
Our series	11.91 hours

A comparison of results in this series with 10 of our cases using catheters showed, in an average of all cases, both multiparae and primiparae, that the interval time between the procedure and onset of labor was 2.16 hours longer. The average duration of labor 2.18 hours longer. We employed one or two catheters, two as a rule. The catheters almost invariably coiled up in the lower uterine segment, as shall be shown with slides. Occasionally they could be introduced slightly higher into the uterus. Three of these cases were considered febrile; another case had temperature ranging from 99 to 100 for seven days; one other case had fever due to eclampsia. In this small series it appears that puncture of the membranes with castor oil and quinine is more efficient and there is less incidence of fever than with catheters.

CONCLUSIONS

The number of cases presented, namely, 20, is too small to arrive at definite conclusions. However, it is a simple procedure, requiring very little operative trauma and, when done under aseptic precautions, has a low incidence of febrile puerperium. The onset of labor is usually more rapid than in other methods, and the duration of labor is not prolonged. No anesthetic is necessary. It has not been found to be injurious to mother or baby. Quinine, thought to be the cause of death of the fetus in certain isolated cases, was not responsible for any in this series. It is possible that we may be able to get equally as good results with a smaller dose of this drug, or perhaps abolish its use altogether. It is not advisable to use this method in cases that have a disproportion where the possibility of cesarian section may arise. In cases of abnormal position or presentation, premature spontaneous rupture of the membranes occurs frequently, with a prolonged and, at times, difficult labor. If artificial puncture of the membranes is practiced in this

type of case a similar condition can be expected.

DISCUSSION

Dr. E. L. King (New Orleans): It has been rather surprising to us that this method is as useful as it turned out to be. It would appear that early rupture of the membrane before labor starts is to be avoided, for all of us have been confronted with patients whose membrane ruptured prematurely and what is called "dry labor" developed.

It was only after reports were published by **Hofbauer, and by other men whose judgment was excellent and whose results were gratifying** that we decided to take up this method. It would seem that the trouble in dry labor as ordinarily spoken of is due to mal-position or other forms of dystocia with which we are dealing and not to rupture of the membrane. In other words, we get early rupture of the membranes in such conditions as occipitoposterior so that the trouble we get into and the difficulties we have are really due to mal-position or mal-presentation rather than to draining off of the fluid. This is certainly manifested by Solomon's method, who emphasized the point that we should not only rupture the membranes but lift the head up and let the fluid escape in order to get efficient action with the procedure.

The thing I want to mention in the treatment is the use of quinine. Quinine has been very popular in the induction of labor since first brought out by Watson several years ago, although several cases of deaths of the fetus apparently from the use of quinine reported by Gellhorn of St. Louis and others. Their contention seems to be that the therapeutic use of quinine in treating cases of malaria found to be pregnant does not influence the fetus, but in induction 30 grains over a period of two hours may give us concentration enough to affect the baby. I have had one or two experiences at Charity where I felt that quinine might have caused death of the baby. However, in this particular series it has more satisfactory than the use of catheters and much safer than the use of bags. Its disadvantage is in the premature cases, 6 or 7 months, where it doesn't seem to work at all. In these cases it is difficult to get labor started by any method.

Dr. T. Benton Ayo (closing): Just one other thing that I want to add, which I failed to state in the paper, that is in all the cases the fluid was drained off by lifting the head up after rupture of the membranes.

We still have a little hesitancy in using that amount of quinine, and in future intend to give 5 grains in 3 doses, about 15 grains altogether.

THE PLACE OF DEXTROSE PHLEBOCLYSIS IN SURGERY.*

REGINALD A. CUTTING, M. D.

NEW ORLEANS

The word "phleboclysis" is derived from two Greek roots, *φλέψ* (vein) and *κλύσις* (injection), and therefore means "the process of introducing any liquid substance into a vein,"—liquid substances, obviously, being the only varieties of substances susceptible of injection.

"Venoclysis", though it is a word which is listed in the dictionary, is a very undesirable term inasmuch as it is a hybrid composed of one Latin root "vena" (vein) and one Greek root *κλύσις* (injection). No person who has even a casual acquaintance with classical languages can use such a term as "venoclysis" without mentally wincing, and conversely, those who use the word without realizing its bastard origin convict themselves thereby of a kind of ignorance which, for centuries, has been considered inconsistent with a liberal education.

Furthermore, the word "phleboclysis" (or "venoclysis") when used without modification, is generic and includes within its meaning all methods of injecting fluid substances into veins; there is nothing in the sense of the word to indicate rate of injection whether relatively rapid, as in the case of most hypodermic injections into veins, or slow, as in the case of the continuous drip infusion. Much less does the word "phleboclysis" include within its meaning any reference to the nature of the substances injected; injections of the arshenamines are just as truly "phleboclyses" (or "venoclyses") as are injections of sodium chloride solution or dextrose solution; even blood transfusions as ordinarily practiced are true "phleboclyses."

The use of the word "venoclysis" to mean "slow, continuous, intravenous infusion" is

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irrational from every point of view and should be discontinued.

Formerly dextrose was often called glucose, but the product as it was prepared was impure and unsuitable for the scientific medical purposes to which it is put at present; accordingly glucose has the significance "impure dextrose." This usage of the two terms is not only sanctioned by history but also by the tenth revision of the United States Pharmacopeia and the usage of an increasing number of careful medical authors. Inasmuch as glucose is never used, or at least never should be used, for parenteral injection one should never speak of "glucose phleboclysis," but always of "dextrose phleboclysis."

"Dextrose phleboclysis," accordingly, may be defined as the process by which a solution of dextrose is instilled into the veins of a patient for therapeutic purposes.

The successful and satisfactory use of dextrose phleboclysis is intimately associated with three important controversial questions:

Is the dextrose which is injected into veins treated by the body in the normal way, *i. e.*, in the same way as that dextrose which is absorbed from the digestive tract?

Can post-infusion reactions be prevented?

When dextrose solutions are administered by vein should, or should not, insulin be administered in conjunction with them?

IS INFUSED DEXTROSE TREATED LIKE INTRINSIC
BLOOD SUGAR?

In answer to the first question, *i. e.*, is the dextrose which is injected into veins treated by the body in the normal way? The assumption has been in the affirmative. It has been universally taken for granted that intravenously injected dextrose is capable of being polymerized and stored as glycogen, and also capable of being catabolized to carbon dioxide and water, during which process it acts as a source of heat and energy.

There is certainly one particular in which infused dextrose may behave differently from ingested dextrose; if injected

too fast and in too highly concentrated form dextrose infusions are followed by urinary spillage or the appearance of dextrose in the urine.

It is generally accepted that glycosuria is not produced in healthy patients by the ingestion of large quantities of dextrose; urinary leakage occurs only when the blood sugar content rises beyond 0.16 or 0.18 per cent, and the ingestion of as much as 500 grams of pure dextrose at one time does not produce a concentration as great as this in healthy patients. (Maclean¹.) Five hundred grams of dextrose, however, is about as large an amount as patients can tolerate because of the development of uncontrollable nausea. Taylor², however, was able to induce natives of Natal, who are very fond of sugar, to swallow doses of 1,000 grams of dextrose, and five of the nine persons who were able to retain this large dose developed traces of sugar in the urine. If this observation is accepted as a normal reaction, it appears that urinary spillage is dependent solely upon the concentration of dextrose in the blood stream and not upon the avenue by which it is received.

When solutions of dextrose are injected intravenously, it must, of course, be remembered that the body of the infused patient is quite helpless to refuse the treatment even though the amount of the substance thus forced upon it exceeds the threshold for blood sugar tolerance. Under such circumstances either good or harm may result depending upon the purpose for which the infusion is given; if given with the idea of combating dehydration, *i. e.*, of supplying water, the result may be disastrous, because during the process of elimination of the dextrose by the kidney quantities of water are also eliminated, and under such circumstances the original dehydration may actually be increased rather than diminished. On the other hand, if the elimination of some toxic drug like the derivatives of barbituric acid is the desired end, the result may be highly beneficial in spite of the strain presumably placed upon

the kidney by the elimination of the unchanged dextrose.

Ordinarily the elimination of any considerable amount of dextrose by the kidney is undesirable, and for this reason the rate of infusion must usually be so controlled that the sugar threshold of the kidney is not exceeded. Most authorities accept the maximum rate of tolerance for intravenous dextrose administration as 0.8 gm. per kilo of body weight per hour as established experimentally by Sansum and Wilder.³ On the basis of this figure the maximum rate of injection for solutions of different concentrations can be worked out by a simple mathematical calculation. In a person weighing 120 pounds, if a solution of 5 per cent strength is used it can be injected as fast as 15 cc. per minute; on the other hand, if a solution of 10.0 per cent strength is used the rate must be reduced by half, *i. e.*, only as fast as 7.5 cc. per minute, whereas, a 50 per cent solution could not be injected faster than 1.5 cc. per minute.

The crux of the matter of dextrose utilization when administered by vein hinges, however, not upon the excretion or non-excretion of the substance by the kidney, but is more fundamental and concerns the ultimate fate of the retained portion of the solution. Formerly, investigators were not a little embarrassed by the fact that analyses of the blood, muscles, and liver of patients who had received dextrose intravenously failed to account for approximately 50 per cent of the dose, and speculation was rife as to what had become of the rest. The result was the "dextrose distribution problem."

The solution of the problem was simple, though somewhat peculiar. Half the dextrose remained unaccounted for only because investigators had failed to look for it in the right place. Folin, Trimble and Newman⁴ showed that the entire amount which had been injected could be recovered analytically if the entire animal was minced and extracted, and that the apparent defi-

cit resulted mainly from temporary storage in the skin. The skin is not, of course, a normal depot of glycogen storage and is therefore believed to act simply as a temporary storage warehouse until permanent accommodations can be provided in the permanent storage places, *viz.*, the liver and muscles.

Another consideration which has caused some perturbation in the minds of those interested in the fate of injected dextrose has been the undisputable fact that the intravenous administration of dextrose does not necessarily increase the basal metabolic rate nor raise the respiratory quotient. The respiratory quotient during fasting averages 0.82, being 0.83 for males and 0.81 for females. The administration of 100 grams of dextrose by mouth usually causes an average maximum increase in the respiratory quotient of 0.12; the increase can usually be noted to begin within 7 minutes and almost always within 30 minutes, and is at its maximum within 2 hours.

Knowing these facts it has been a source of surprise to some that such an increase in the respiratory quotient cannot always be produced by an infusion of dextrose. The explanation is simple, though perhaps not obvious. The effect of oral administrations of dextrose on the respiratory quotient has been studied for the most part on persons or animals who were fasting, to be sure, but in whom there was a normal or only slightly reduced supply of glycogen in the glycogen reservoirs, *viz.*, the muscles and the liver. Under these conditions, the body promptly proceeds to dispose of any additional dextrose it receives by combustion, and the respiratory quotient almost immediately increases. On the other hand, as Rabinowitch, Frith and Bazin⁵ have shown experimentally, in those conditions associated with primary depletion of glycogen, *e. g.*, fatigue induced by prolonged muscular exercise, starvation, or post-operative recovery, the oral administration of dextrose frequently fails to increase the respiratory quotient at all and may actually de-

crease it. In such cases the body is not prodigal as formerly with its new fuel, but stores it for a time of more urgent need.

The body responds under the last type of condition to injected dextrose precisely as it does to ingested dextrose, and as Koster, Collens and Goldzieher⁶ have demonstrated, dextrose infusions of moderate proportions usually fail to increase the basal metabolic rate in post-operative cases for a period of about ten days.

The question as to the ultimate fate of injected dextrose therefore can be answered as follows: (1) It may be released through the kidney in the urine if administered so rapidly that the mechanism of temporary storage is overtaxed, and the blood sugar rises beyond the kidney threshold; (2) if not, it is temporarily stored in considerable part by the skin; (3) if the glycogen store in the liver and muscles is adequate for future needs it is in considerable part soon catabolized to carbon dioxide and water, during which process it serves as a source of heat and energy and causes an increase of the basal metabolic rate and an increase of the respiratory quotient; (4) if the glycogen stores in the liver and muscles are inadequate, noticeable catabolism does not occur, but on the other hand the dextrose is conserved, to be ultimately stored in the natural glycogen reservoirs. In short, there is no evidence, either direct or indirect, to indicate that the body treats injected dextrose any differently from ingested dextrose.

CAN POST-INFUSION REACTIONS BE PREVENTED?

In answer to the second question, can post-infusion reactions be prevented? It seems logical to assume that the fundamental problem is to discover the cause or causes of these reactions, and that once these are known the means of prevention should be reasonably obvious.

Although many explanations for the so-called post-infusion reaction have been proposed, it has usually been assumed that there is but one cause, and this in spite of the fact that post-infusion reactions may occur after the lapse of variable periods

of time ranging from 30 to 40 seconds to several hours, after the injection of variable amounts of solution ranging from one or two cc. to several thousand cc., after the injection of relatively concentrated or relatively dilute solutions, and may occur in all degrees of severity from a mild and fleeting pyrexia to complete collapse or even death in extreme cases. In view of these facts, it would seem at least on *a priori* grounds that the etiology is probably compound or complex rather than simple, and that several factors may be operative.

Insofar as one can judge from hearsay reports of cases which have exhibited severe and fatal reactions from dextrose infusions the cause seems as often as not to be some gross lapse in technic, frequently a fault in the preparation of the solution, occasionally such an error in administration as a rapid massive infusion of a concentrated solution.

As far as the published cases of fatal results are concerned, such gross errors are sometimes perfectly obvious though sometimes they can only be surmised by reading between the lines. It takes a certain amount of moral courage to confess as frankly as Yenani⁷ in his published report that the solution which caused the deaths was an improvised one, sterilized over the open flame by boiling, obviously caramelized, and containing debris and particles of insoluble material in suspension.

That thrombosis and embolism may occasionally cause death after intravenous dextrose infusion is suggested by the report of a case by Askey and Hall⁸ in which at autopsy multiple thromboses of the cerebral and coronary arteries and embolism of the renal artery with infarction were demonstrated.

Clark⁹ reported a series of cases in which patients died of cardiac dilatation after receiving from 425 to 500 cc. of dextrose solution of 2-10 per cent strength.

Kosakai¹⁰ has observed that the injection of as concentrated a solution of dextrose as 20 per cent causes the destruction of some erythrocytes and most observers

who have been attentive to this possibility are able to corroborate this statement. That this destruction of erythrocytes produces untoward clinical reactions, however, has apparently not yet been substantiated.

A late post-infusion reaction which differs from all others and usually occurs only after a large bulk of solution has been administered is the so-called "water intoxication" syndrome of Rowntree, which is characterized by nausea, restlessness, muscular tumors, convulsions, collapse, stupor, and coma.

In those cases in which ordinary care is exercised in the preparation of solutions, *e. g.*, the use of pure dextrose, carefully distilled water, adequate sterilization, and the infusion is allowed to proceed at a reasonable rate, the causes of post-infusion reactions are by no means obvious. Even in the early days of the infusion method it was appreciated by many workers that post-infusion reactions could be largely minimized by insisting upon a chemically pure drug and the best obtainable water, *i. e.*, triple distilled water.

It remained for Seibert¹¹ however, to show wherein the necessary purity consisted. Like the Listerians who taught the world that safety in surgery would be achieved not by simple cleanliness but only by sterilization, so Seibert has shown that safety in intravenous infusion can be achieved not by chemical purity or sterilization alone but only by the elimination of the specific pyrogenic factor in the infusion vehicle. It happens that this pyrogenic factor or "pyrogen" occurs not in the dextrose but in the water. Pyrogen is of unknown chemical composition, but it is definitely a product of bacterial growth; the bacteria which produce it are killed by ordinary methods of sterilization by heat, but the substance itself remains potent after sterilization. Ordinary methods of distillation do not necessarily rid water of this pyrogen, because it may distill over mechanically in minute droplets not completely reduced to vapor. This mechanical

effect, however, may be overcome by the use of a simple device such as the "multiple baffle plate spray catcher" or the "Glin-sky tube," devices which are listed in all chemical supply house catalogues.

Rademaker¹² has shown that water singly distilled through such devices, if used immediately, contains no pyrogen, and the intravenous infusion of solutions made with such water as a vehicle, produces no post-infusion reactions if other requisites of a safe technic are observed. If, on the other hand, this pyrogen-free water is allowed to stand for any considerable number of hours exposed to the air, bacteria settle out of the atmosphere into it, multiply, and contaminate it as before.

Pyrogen free water can be preserved in its purity after distillation only by complete and immediate sterilization and sealing against subsequent bacterial contamination; the seal may take the form either of a hermetic closure or more simply as the familiar "capping" of the bacteriological laboratory,—either method is effective at least for a period of fourteen days.

The statement previously made that infusions prepared with pyrogen-free water cause no reactions has been expanded, experimentally, in a most thorough manner by Rademaker. One by one he has eliminated most of the factors previously regarded as of etiological importance in the causation of reactions.

Perhaps the most interesting theory of causation of post-infusion reactions which seems to have been overthrown by the discovery of the actual pyrogenic substance, is the hydrogen ion theory. This theory which had considerable vogue about ten years ago led to the somewhat widespread use of buffer substances in dextrose solutions intended for infusion. Few authorities at the present time think of buffering ordinary dextrose solutions to control the acidity, and this in spite of the fact that distilled water may vary in pH from somewhat more than five to somewhat less than eight. The buffer action of the blood itself

is apparently able to take care of all ordinary variations in the chemical reactions of the infusion solution.

Rademaker deals summarily also with the question of temperature by showing that when pyrogen is not present in the distilled water used in the preparation of the infusion solution the temperature may vary within comparatively wide limits without causing any reaction whatever. This was the teaching, interestingly enough, of Rudolph Matas¹³ in his original description of the continuous drip infusion in 1924, in which he stated that infusions could be given at room temperature with benefit in those patients in whom pyrexia was extreme and increasing, whereas in patients with hypothermic or decreasing temperatures a hot infusion was equally of benefit.

In a similar way Rademaker disposes very convincingly of many of the other former bogies of the intravenous infusion:

- (1) The alleged toxic substance derived from rubber tubing.
- (2) Speed of injection.
- (3) Individual susceptibility.
- (4) Disease itself, and
- (5) Absorption from glass ware.

Whether all of Seibert's theoretical work and Rademaker's practical experimental conclusions will escape unfavorable criticism at the hands of future investigators remains to be seen. It seems to me quite safe to ascribe to the action of the aforementioned pyrogen or pyrogenic substance many or perhaps most of those reactions formerly laid at the door of hydrogen ion concentration, individual susceptibility, disease itself, temperature of solution and absorption from glassware, but I question whether it is possible to dismiss the case for (1) toxic products derived from rubber tubing and (2) speed of injection quite so summarily.

Although Rademaker was unable to produce reactions in patients injected with solutions in which fresh rubber stoppers had been boiled until they smelled strongly of rubber (unless pyrogen was present in the

water at the start) it should be recalled to mind that Busman's¹⁴ original work with the reaction-producing properties of fresh rubber (1) was concerned not with the rubber contained in rubber stoppers but that composing pure gum rubber tubing, and (2) that his reactions were obtained not after infusion but after blood transfusion. While admitting the possibility that fresh rubber tubing may actually be innocuous when used in an infusion outfit and that the reactions usually ascribed to the tubing may in fact be due to pyrogenic water in which the tubing may have been previously washed or sterilized, the matter does not seem to have been definitely settled, and in the meantime I would prefer to prepare any rubber tubing that I might have occasion to use essentially in the manner originally suggested by Busman, and supplement the procedure by thorough rinsing of the tubing in pyrogen-free water.

The possible influence of the speed of injection on the occurrence of post-infusion reactions has recently been emphasized by Hirschfeld, Hyman and Wanger.¹⁵ They have presented rather convincing experimental evidence to show that excessive speed of injection of any otherwise innocuous solution introduced intravenously may cause within from 40 to 60 seconds symptoms of rapid and extreme depression of the blood pressure, extreme dyspnea or even apnea, and other symptoms such as salivation, vomiting, diarrhea, muscular atony, and muscular spasm; the reaction may or may not prove fatal. This reaction they have called "speed shock." Although Hirschfeld and his collaborators have apparently shown definitely that the phenomenon is not due to the presence of pyrogen, or to excessive vagal stimulation and that it cannot be produced in dehepatized animals, they have not very satisfactorily demonstrated their theory that it is definitely of hepatic origin. The phenomenon is undoubtedly a definite entity as the experience of many a physiologist, experimental surgeon, and clinician will testify, and the

contribution, whatever may be learned subsequently concerning the matter, is of definite value in emphasizing a matter of universal experience, viz., the danger of forcing intravenous solutions to flow too rapidly.

In summary of the matter of the prophylaxis of post-infusion reactions therefore, it seems safe to say that they are, in part, probably mainly, preventable on the basis of information at present available. When using an infusion solution composed of pure dextrose and pyrogen-free water delivered into a vein by properly prepared apparatus, the hydrogen ion concentration, the concentration of dextrose, the temperature, and the rate of infusion are not critical either separately or collectively. The hydrogen ion concentration should, of course, not vary unduly from that of the blood; the concentration of dextrose should not be definitely hypotonic so as to cause laking of the erythrocytes, and if excessively hypertonic should be injected with extreme deliberation; the temperature should not ordinarily be below 90 degrees F. or above 110 degrees F., but may vary with safety between these limits, and the rate of infusion should not exceed the maximum tolerated rate above which dextrose spills over into the urine. Within these limits, however, all these factors can safely be made secondary to the particular indications for which any given infusion may be required, and because, for instance, the obstetrician may find it to his particular advantage to use a 25 per cent solution of dextrose in a case of pernicious vomiting of pregnancy at a given reasonable rate of speed in a given optimum dose, and at a given temperature, is no reason why the neurologic surgeon should not use a 50 per cent solution in a different amount and at a different rate of speed in the treatment of a case with increased intracranial tension, or the industrial surgeon should not obtain a maximal effect in a case of hemorrhage or shock from an infusion of a 5 per cent solution at a much greater temperature, at

a still different rate of speed and perhaps in huge quantities.

SHOULD INSULIN BE USED IN CONJUNCTION WITH INFUSIONS OF DEXTROSE?

Insulin was, of course, discovered and developed in connection with the treatment of diabetic patients; at first the administration of the drug was beset with difficulties, because the proper dosage and the principles underlying the regulation of dosage were uncertain. Under the circumstances of its early use excessive doses were frequently given inadvertently, and the condition of insulin shock, hyperinsulemia, or acute insulin hypoglycemia frequently ensued. The remedy was soon found to consist in the administration of dextrose, and because the symptoms of the condition were frequently alarming, the dextrose was frequently injected intravenously in the form of an infusion. Out of these and similar dramatic experiences with the use of insulin in diabetic patients grew the conception that a given amount of insulin is capable of causing the catabolism or utilization of a given amount of dextrose much as a given amount of alkali is neutralized by a given amount of acid, and this conception is, as a matter of fact, essentially correct as concerns extreme clinical diabetes uncomplicated by infection, and animals in whom experimental diabetes has been produced by removal of the pancreas. A difficulty arises, however, when one attempts to apply the same principle to the non-diabetic patients which constitute by far the greater proportion of patients in whom intravenous dextrose infusions are used.

Although Murlin¹⁶ reported in 1925 that insulin was inactivated by incubation with a 0.3-1.0 per cent solution of dextrose at 37° C. for from one to two hours, du Vigneaud,¹⁷ repeating Murlin's work later in the same laboratory (University of Rochester, New York), was unable to substantiate this finding. It seems plain, therefore, that insulin does not react directly with dextrose at all; *i. e.*, not in the same sense

that one chemical compound reacts with another in solution.

In fact, there is considerable doubt whether insulin when artificially introduced into normal animals stimulates the oxidation of dextrose (*i. e.*, stimulates carbohydrate catabolism) at all. Amongst those who have reported an increased rate of carbohydrate metabolism after insulin injection are Dudley and Marrian,¹⁸ Lyman, Nicholls and McCann,¹⁹ Ringer²⁰ and Katayama and Killian.²¹ On the other hand, Rabinowitch and Bazin,²² have shown in a series of eight normal human beings that the injection of insulin may temporarily, at least, caused decreased utilization of carbohydrates and an altered metabolism; these authors check both the blood sugar and respiratory quotient simultaneously.

With regard to the effect of insulin injection on the utilization of artificially injected dextrose Cori and Cori²³ demonstrated that the tolerance of fasting rats could be increased from 2.5 to 3.0 grms. of dextrose per kilo per hour, or 20 per cent, by the injection of 20 units of insulin and that the tolerance of fasting rabbits could be increased from 0.9 to 1.3 grms. per kilo per hour, or 40 per cent by the injection of 40 units of insulin. Twenty units of insulin, however, is a rather remarkably large dose for a rabbit. Wierzuchowski²⁴ working with dogs found that when he injected dextrose without insulin at a rate of 2.0 grms. per kilo per hour, 12.1 per cent of the amount which he infused appeared in the urine, whereas when he added insulin only 0.5 per cent appeared in the urine.

Chaikoff and Macleod²⁵ found that the injection of insulin into rabbits might or might not increase oxygen consumption and the respiratory quotient depending upon the nutrition of the animal. Those rabbits which had been fed carbohydrates until the respiratory quotient stood at unity experienced no reaction whatever after insulin injection, whereas, rabbits in a fasting condition showed a significant in-

crease in carbohydrate metabolism.

These are only a very few representative findings from a host of experimental data on the relation of exogenous insulin to carbohydrate metabolism in the non-diabetic subject. Further quotations would serve merely to illustrate a conclusion to which the thoughtful person is inevitably forced, and which might as well be stated without further delay, *viz.*, that the physiologic action of insulin in the non-diabetic subject is apparently complicated and certainly unpredictable on the basis of such knowledge as is at present available.

Andrews and Reuterskiold²⁶ hazard the opinion that insulin when injected into the non-diabetic subject:

(1) Promotes storage of glycogen in the liver.

(2) Converts dextrose into some more oxidizable hexose, and

(3) "Brings about an increased affinity of tissue for water, thereby causing a concentration of the blood."

These authors have called especial attention to the danger of using insulin in connection with dextrose solutions when infusing patients suffering from post-operative acidosis and dehydration; they have observed that the dehydration effect of insulin is very pronounced in such patients and they conclude that the use of insulin under these conditions is a highly dangerous and useless procedure.

Titus and Lightbody²⁷ have called attention to the apparently well established fact that the administration of dextrose to non-diabetic patients stimulates the pancreas of these patients to increased secretion of endogenous insulin, and it is upon the basis of this phenomena that they have developed their "optimum dose" of dextrose. That this endogenous production of dextrose when reinforced by the artificial injection of insulin may actually lead to a condition of hyperinsulemia, has not, however, I believe, been sufficiently stressed. It is not at all impossible that some of the late infusion reactions which are sometimes seen

following the slow injection of dextrose and insulin actually represent a condition of insulin shock.

In summary, the only conclusion that can be reached at present with respect to the use of insulin in connection with dextrose in non-diabetic patients is that the insulin effect is not at all clearly beneficial and seems in certain cases to be clearly baneful. The "paradoxical hypoglycemia" following plain dextrose solution infusions as stressed by Titus and Dodds amply demonstrates that the function of insulin production by the pancreas is not ordinarily defective in the non-diabetic patient and accordingly the need is not for more insulin to make possible the utilization of more dextrose, but merely for more dextrose to be utilized by the action of a normally functioning and perfectly adequate pancreas.

Unfortunately, limitations of time and space preclude any attempt to treat in detail the specific indications for dextrose phleboclysis in surgery. It is suggested, however, that a schema like the following may be of some value in visualizing the more important general indications for the infusion of dextrose. This classification, as will be noted, is a physiological one and is based on the part presumably played by the dextrose, by the water, or by both dextrose and water.

INDICATION FOR DEXTROSE FRACTION:

(1) The control of acute hypoglycemia whatever its etiology, whether produced by the injection of insulin and associated with the so-called "insulin reaction" or occurring in a variety of other conditions such as the terminal stages of burn toxemia. (Greenwald and Eliasberg.²⁸)

(2) As a means of supplying readily available food and energy under circumstances which preclude proper functioning of the normal processes of ingestion, digestion, and absorption; specifically in the acute toxemias which are associated with excessive nausea and vomiting, *e. g.*, the vomiting of pregnancy. (Titus and Dodds).

(3) As a stimulant of the process of diuresis:

- (a) In nephritis.
- (b) In the treatment of certain varieties of poisoning, *e. g.*, barbitol (Johnson, Luckhardt and Lighthill.²⁹)

(4) As a means of producing dehydration, specifically the reduction of the bulk of the brain tissue, in cases of cranio-cerebral injury.

(5) As a means of supplementing, fortifying, or increasing the functions of the liver, specifically:

- (a) As a prophylactic preoperative measure in the more radical procedures of surgery of the biliary tract.
- (b) As a part of the active treatment of so-called "hepatic insufficiency."
- (c) As an indirect means of shortening the coagulation time of the blood. (Ravdin, Riegel & Morrison.³⁰)

(6) As a means of combating the variety of acidosis called "ketosis," which is dependent upon insufficient dextrose catabolism, and which is common in connection with various conditions, specifically in surgery, in

- (a) Diabetes.
- (b) Pre-operative or post-operative starvation.
- (c) Prolonged general anesthesia.
- (d) Conditions of unstable or excess metabolism such as are found amongst infants and children and adults with thyrotoxicosis.

INDICATIONS FOR WATER FRACTION:

(1) As a means of restoring blood volume and combating a failing circulation either in lieu of, or as a preliminary to blood transfusion, in conditions of profound toxemia, shock, and hemorrhage.

(2) As a means of combating dehydration, either pre-operatively or post-operatively in cases of dysentery or severe

diarrhea, or in extensive superficial burns, and intestinal obstruction; in the last named two conditions, however, the dextrose is only a valuable adjuvant to sodium chloride solutions, the action of which is more specific.

INDICATIONS FOR BOTH DEXTROSE AND WATER FRACTIONS:

(1) As a means of supplying both water and nutrition to patients who can tolerate neither substance by mouth and in whom for one reason or another the other channels of administration are not considered ample, specifically:

(a) In the early post-operative period in the case of patients who either were victims of dehydration and inanition at the start or in whom the operative procedure itself was an extreme ordeal.

(b) In cases of prolonged peritonitis and profound surgical sepsis. (Matas.³¹)

(2) In cases of gastric, duodenal, or high jejunal fistula in which material introduced by mouth finds an exit from the gastro-intestinal tract before it has had time to be absorbed.

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DISCUSSION

Dr. E. L. King (New Orleans): Dr. Cutting has left very little to be said about this subject, but there are a great many points to be brought out that are extremely important from a practical point of view concerning the use of glucose.

There are a few things I want to mention from the point of view of the practical side of the use of glucose intravenously, some brought out by various observers, some noted from our own work. One is the question of the spilling over of glucose into the urine in case the infusion is given too rapidly. Titus in Pittsburgh has done very interesting work and has reached the conclusion that the average patient cannot handle more than a certain amount of glucose. He feels that there is a dose of glucose, just as there is a dose of morphine, or any other preparation, and from his work has concluded that the dose of glucose that can be properly handled by the average patient is 75 grams at one administration. Furthermore, he feels that that should be given over a considerable period of time. In his experience, it takes 1½ hours for a patient to absorb 75 grams of glucose. He feels the best way is in a 25 per cent solution given at the rate of 100 cc. every 30 minutes, in other words 300 cc. given in 1½ hours.

With regard to reactions, we do not see as many as formerly, whether due to better preparation of glucose or not. Several years ago, I had a series of reactions in a hospital here in town. I proceeded to get busy and find out about the the preparation of the solution. The main thing was the preparation of the distilled water and I found out it was not manufactured in the pharmacy and was not bought from a wholesale druggist, but was condensed steam from the power house of the institution, and that condensed steam was collected and sterilized and used in the preparation of glucose. I questioned the absolute cleanliness of that and suppose this method of manufacture was discontinued as I have had no reactions of consequence since that.

I would like to ask Dr. Cutting about pyrogen's responsibility for so many reactions. Is it easy to be detected by test? Next, if the apparatus that is capable of eliminating pyrogen is used in any local institutions?

The question of rubber tubing as a cause of reaction brought out by Dr. Cutting, is a fact to

be considered, especially new rubber tubing that has not been properly prepared.

About the use of insulin in conjunction with glucose, there has been quite a divergence of opinion in obstetrical literature on this point. Titus of Pittsburgh contends that insulin should not be used in pregnancy and Thalheimer of Milwaukee contends just as strongly that it should be used. Titus contends that the use of insulin is not necessary because the pancreas is not affected in the vomiting of pregnancy, that it may get us into trouble and may be actually a danger to give insulin along with glucose. Thalheimer contends that the use of insulin helps catabolize glucose and make it available for food supply. However, I find in treating severe cases I seem to get better results with the use of insulin—1000 cc. of 10 per cent glucose given slowly, 1½ hours to give it; 30 units of insulin in broken doses along with the glucose. I am very sure this has helped a few of my pregnancy cases more than plain glucose. That is purely empirical and may be wrong. The use of glucose in other toxemias of pregnancy has been of benefit, particularly in eclampsia.

Dr. Cutting (closing): The optimum dosage and rate of injection of dextrose in solution can no longer be regarded as a matter of opinion. It has been determined by Cori, Wilder, and Sansum that the human body is capable of utilizing dextrose no faster than from 0.75-0.80 gms. per kilogram of body weight per hour; on this basis it is possible to calculate mathematically the maximum rate at which solutions of different percentage strengths can be given without causing glycosuria, and obviously the maximum tolerated speed is greater for dilute solutions than for concentrated ones. With respect to the total amount of dextrose to be given at any one seance, the work of Titus, Dodds, and Lightbody is of more than passing interest. These workers in the field of obstetrics prefer for the purposes of their own speciality 25 per cent solutions of dextrose. They find, when they inject this solution at the maximum tolerated rate and continue the injection at that rate indefinitely, that the blood sugar responds by a gradual and progressive rise to a certain maximum value, after which it undergoes a gradual progressive fall which frequently takes it eventually even below the value it had at the beginning. Inasmuch as these variations in the blood sugar level occur in spite of the fact that the influx of solution is maintained at a constant level, the explanation of the blood sugar variation must be sought in a response of the body, most probably a response of the insulin producing or liberating function of the pancreas. The maximum elevation of the blood sugar reaction curve before it goes into its subsequent decline is therefore

taken as the point marking the change from maximum dosage to overdosage; this end point is reached when 75 gms. of dextrose have been administered.

Pyrogen is a product of bacterial growth, presumably a protein or a cleavage product of protein; it occurs in such minute amounts in distilled water, however, that it cannot be detected or isolated by ordinary chemical means. Minute amounts of this substance are nevertheless apparently capable of producing profound reactions when injected intravenously, such amounts as might adhere to rubber tubing or glassware during washing or sterilization of infusion apparatus with contaminated water. It would be futile to attempt to prevent reactions by the most careful preparation of solutions and then to use an infusion apparatus which had not been thoroughly purged of pyrogen by generous washing with pyrogen-free water.

A FEW CRITICAL REMARKS ON THE "WHYS AND WHEREFORES" OF BAD RESULTS IN FRACTURES OF LONG BONES.*

A. C. KING, M. D.

NEW ORLEANS.

This paper is intended to call attention to unfortunate results in fractures of long bones only, since deformities occurring in this class of cases are more evident to the eyes, especially the eye of that physician responsible for such conditions.

None of us enjoy the spectacle of one of our patients ambling along with a limp, or of trying to perform manual labor with a crippled hand or arm, and if our conscience is in good shape, our one wish is that our work had been better performed. A crippled hand or arm does not always mean bony deformity alone, but bony deformity plus an ischemic contracture due perhaps to an improperly applied splint or cast or to excessive pressure produced by a tight bandage enthusiastically applied in the vain hope that what our lack of skill failed to accomplish, the tight dressing might.

A good rule to follow is to make your

dressing fit the patient and *not* the patient fit the dressing!

A few words regarding Volkman's contracture may not be amiss. Myerdig, of the Mayo Clinic, reported in 1930 as having observed, from 1910 to 1927, one hundred and twenty-eight cases, seventy of which had splints, twenty-five had casts, ten had bandages, eight had splints, bandages and flexion, and so on. Not all cases were due to fractures, but the majority were. Considerable controversy still goes on as to the cause of this almost incurable condition, its pathology, etc.; but controversy does not cure the patient. Surely this is one condition where prevention is far better than cure, and this is accomplished only by eternal vigilance following the reduction of your fracture.

In times now happily consigned to the limbo of forgetfulness, with no roentgen ray to guide us, our efforts at reduction consisted merely of extension, moulding the fragments by hand, and the application of whatever apparatus we were accustomed to use. A straight limb meant correct replacement and there was no intermediate roentgen ray check-up, as we have today. Results were good, bad or indifferent. We pulled on the limb and hoped that the bones would accommodatingly fall into correct alignment, and applied the dressing.

We were limited as to pathological knowledge, apparatus, material, and a clear understanding of muscular action, besides which there existed no unity of opinion in regard to methods of procedure and appliances. In short, this phase of surgery had been terribly neglected, a broken bone being simply a broken bone which anybody could repair.

Permanent crippling was common and amputation frequent in compound or infected cases.

The World War brought us up with a jerk and we came out of it with a clearer understanding of treatment, appliances, results, and best of all, a fairly unified profession as to the handling of certain types,—more particularly fractures of the

*Read before the Orleans Parish Medical Society, December 14, 1931.

femur and compound fractures in general. Physiotherapy has come into its own as a restorative measure, and we are now concerned, as never before, with final results.

The question in my mind today is, "Do we instruct our younger men adequately in this line of work?" "As a twig is bent, so does the tree grow." As a young man is taught, so does he practice until later in life he may wake up to find that he has been emulating our ancient and respected friend, Rip Van Winkle, and finds himself far in the rear of medical and surgical advance.

Much of our work today is on a par with that of many years ago, an example of which is that of splinting fractures of the bones of the forearm with stiff flat boards, instead of carefully moulded, well-fitted splints of plaster. That is one illustration only. There are others.

We do not expect the student to specialize in this type of work and become an expert any more than we expect him to perform delicate operations without adequate training, but the man who becomes a general practitioner should at least fit himself to handle fractures, since, thanks to the auto, a large part of his practice will consist of fractured legs and arms. Neither do we expect him to perfect himself in two short years of internship, in open work, bone grafting, and such, but he should be willing to learn enough to turn out satisfactory work in the ordinary run of the day's cases. As to open work, that is almost a specialty of itself, and as Dr. E. Denegre Martin said in a recent address, "I know of no branch of surgery which requires more skill, a more thorough technic, greater regard for asepsis, patience, and thought, than this subject".

The late Dr. John B. Murphy said this, "In doing bone work, you must expect and demand of yourself, a profound technic and a superlative degree of asepsis."

I am amazed at times with final results in the simplest kind of fractures, and realize that the fundamentals are lacking in those

responsible for such work. Gentlemen, where lies the trouble, and what is the remedy?

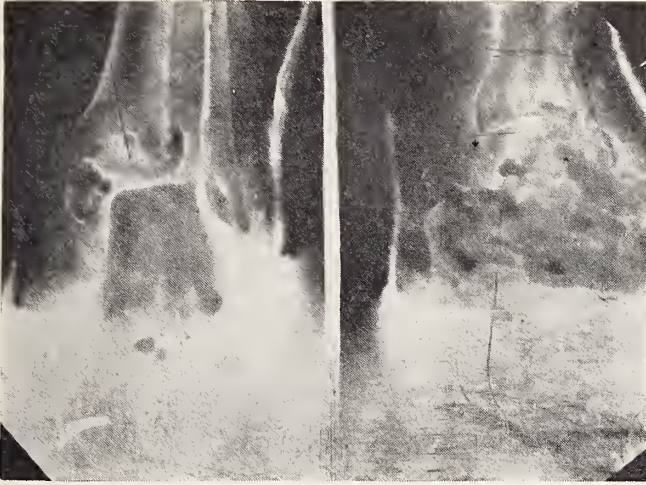
A letter recently from one of my ex-interns, who manifested great interest in the details of open reductions, tells me this: "I helped my two associates do a couple of open reductions recently. On one I managed to get a pair of gloves, on the other neither gown nor gloves. Ain't this hell"?

Tragedies occur in all branches of our profession, many of them unavoidable, due, in the field of fractures for instance, to the terrible crushing injuries in factories, to compound comminuted cases in automobile accidents. Yet every day we are better prepared to cope with these conditions and certainly our results are far superior when compared with similar cases years ago. Even so, in the experience of any one of us under whose eye large numbers have passed, and many roentgenograms have been studied, many cases we find badly treated and deformed, when a little more care, a little greater mechanical skill, a little more help, the more frequent use of anaesthetics, and at least the fluoroscopic check up, might have ended in more satisfactory results and a happier patient and a more satisfied doctor.

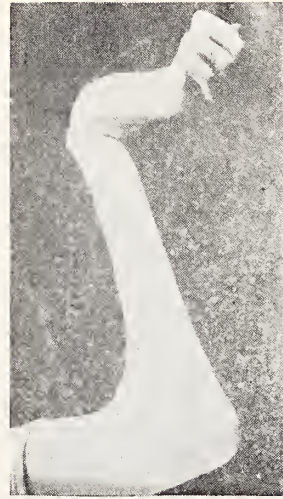
The slides I now present are mute evidences of ignorance, laziness, indifference, or all three, and you are at liberty to make your own deductions.

DISCUSSION

Dr. E. D. Fenner (New Orleans): Essayists who invite our admiration, in discussing fractures rarely show us any pictures like these. Their pictures are nearly always perfect examples of anatomical reduction and beautiful results. But all these essayists have pictures in their lists that they do not publish for us, and I think it is unquestionable that all of us who have much to do with fractures have lists of roentgenograms which are not satisfactory. Fortunately, not all fractures that are not anatomically reduced are functionally bad in the end, and it is also quite true that cases which apparently have gotten excellent reduction may show a great deal of disability afterwards. But there is no doubt that there is entirely too much of the kind of thing that Dr.



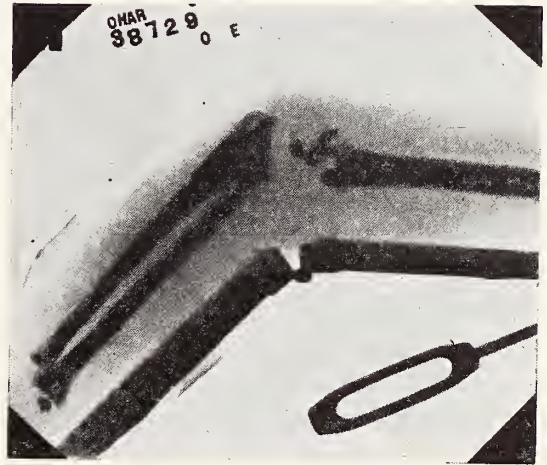
Supposed to be reduced. Plaster cast applied.



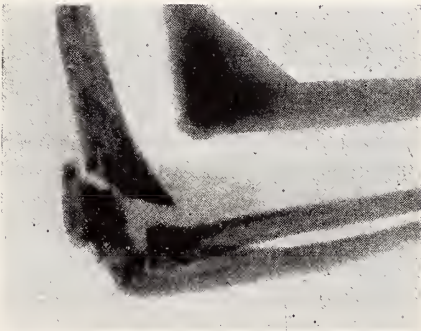
Volkman's Contraction.



Not reduced. Improper splint.



No reduction. Bad result.



No reduction improper splint.



Right angle splint. No reduction.



Neglected Pott's Fracture.

King has shown us in the slides which he has presented before you tonight.

My feeling is that there are two or three things in connection with very common fractures—and I would list as common, all fractures of the clavicle, Colles' fracture at the wrist, Pott's fracture at the ankle, which are important.

If we could but impress upon the young man who is starting out in the treatment of fractures, who gets but occasional cases, in regard to fractures of the clavicle, that there are a good many ways to get fairly good reduction. It is a consolation that they are far more common in children than in other classes of patients. In childhood, it doesn't make much difference whether you reduce or not. Nature will wipe out the deformity, but in the case of the adult, a badly reduced or badly positioned fracture of the clavicle leaves a very unsightly deformity.

When it comes to the next most common fracture, Colles' fracture at the wrist, I do not think it can be sufficiently impressed that something ought to be done to put the articular surface of the radius at right angles to the shaft of the bone. Just as long as you have the articular surface of the radius tilted towards you at an obtuse angle to the shaft of the radius, there is going to be disability, not only unsightly, but crippling the patient for the rest of his life, and therefore, it cannot be too strongly impressed that these fractures ought to be reduced until the concavity of the anterior surface of the wrist is restored.

In Pott's fracture, the nature of the injury is such that the astragalus is slipped outwards on the lower end of the tibia. This produces valgus position, which corresponds to flat foot and is the most crippling position in which the foot can be placed. In dealing with this fracture, we ought to urge on the man treating it the absolute necessity of pushing the foot in on the leg and turning the sole in, inverting the foot. It has been my privilege and my honor to introduce into Charity Hospital, the Hamilton Russell method of treating fractures of the femur. It is a very interesting thing as years have gone by to find my friend Dr. Bradburn, who at first laughed at me and would not take any stock in this treatment and was at that time using very extensively Steinman pins and calipers, abandon them in favor of the Russell method of traction. He gets a great deal better results than I do, but I am still using it. It certainly is a superior method of dealing with fractures of the femur.

If you are going to get success with this, or any other method, it is necessary to pay attention to details. We see, particularly in big hospitals like

Charity Hospital, internes passing by a bed where the patient is complaining of pain from the dressing. They think that is a necessary part of the treatment or that the patient is unreasonable. My own belief is that whenever the patient is complaining of pain from the bandage something is the matter with that bandage. It ought to be loosened or re-applied, and the thing that is causing the pain corrected. You find it in the fracture wards, where the patient has a plaster of Paris bandage on his foot and is complaining of pain in his heel, and you see the internes passing by as though it was something not to be attended to. And yet to change that bandage or reapply the plaster of Paris will make the patient comfortable. You find it where you see traction applied like Buck's extension. The patient suffers acute pain over the tendon Achilles, then after a few weeks the bandage is removed and an ulcer has developed, and an ulcer like that will take weeks and weeks and weeks to heal. Whereas, recognition of the fact that the patient's complaint of pain was an indication that something was wrong would have led to correction of the trouble.

So that if I had anything to give in the way of advice, it would be: Never neglect complaint on the part of the patient that the bandage or dressing is causing pain. Something is wrong if that is the case, because a well applied, and properly applied bandage that is not doing any damage ought to give relief instead of pain. And a second piece of advice would be to make sure that you have gotten the bones in good position, if you possibly can, particularly if the injury is in the neighborhood of one of the joints.

I am sorry I cannot agree with Dr. King that the World War has solved for us the treatment of fractures of the femur. It has not solved them for me, and our Journals would indicate wide divergence of opinion. Our war experience was certainly of great value, and has done much to reduce the percentage of bad results.

Dr. E. Denegre Martin (New Orleans): Dr. Fenner has covered the subject pretty thoroughly. However, I would like to emphasize some of the points discussed, especially with regard to the bandage. My experience has been rather extensive in this work. After my first twenty years in the treatment of fractures, I began to appreciate my mistakes. Some get along with three months.

Had I known just what slides Dr. King would show tonight, I could have contributed many more. But the one thing I especially want to emphasize is what Dr. Fenner said in regard to pain. Whenever a fracture has been set and the bandage gives pain, the fracture is in the wrong position or the bandage badly applied. When I began to

treat fractures, we had no roentgen ray. We did the best we could. In those days, when one got functional results they were pleased. Very seldom did a femur unite with less than one and one-half inch shortening. I remember my first compound fracture, in 1890. This man left the hospital with a good leg. He came in with a compound fracture of the femur, above the condyle. The next morning, the boy was comfortable and was put in a Buck's extension, the best means of treatment at our command. When Dr. Parham came in the morning, we decided to make an effort to save the leg as the boy was in excellent condition. Dr. Parham had just introduced aseptic surgery into the hospital. We treated the case accordingly and that boy of seventeen years walked out three months later with a perfectly good leg.

I became very much interested in the treatment of fractures at that time and I remember reading a paper in 1908 before the American Medical Association, calling attention to the lack of treatment of fractures in the Hospitals. It was discussed by Murphy, Ochsner and others, and all agreed we were not giving the time to fractures we should. The man who specializes in fractures today has a problem which requires more attention to detail than any other. It requires constant watchfulness. The men who are succeeding today are giving every moment of their time to fractures.

Fractures about the joints are always more complicated.

Never resort to open reduction unless forced to. Most of those who come to us now were treated by the inexperienced. They come in such condition that the limb is practically useless. In open reduction you cannot succeed unless the material used will hold the bones in apposition until union is firm enough for the weight to be carried. I have removed at least twenty plates put in and held with short screws. At first I did not realize that in using machine screws the hole had to be drilled with a machine drill one thirty-second of an inch smaller than the screw. Sometimes manipulation during the application of the plaster bandage would cause them to pull out. But since the introduction of long screws (Dr. King will bear me out), I have not had to remove a single plate. In one instance, the screws held while the plate broke in half. That is because the screws, if properly applied, will hold firmly. Treatment for fracture of the patella succeeds now because up to this time no material used held long enough to get bony union. It takes a fracture of the patella from four to six months to ossify.

Dr. A. C. King (closing): I want to get straight on the remark quoted by Dr. Fenner that

the World War has taught us to handle fractures of the femur. The War brought us up with a jerk and we began to interest ourselves in the treatment of all fractures.

I want to compliment the members of the New Orleans profession on their results in fractures. I have visited hospitals in New York City and looked into the fracture situation and I got a good deal out of it and found out this: that with all their facilities, their results are no better than ours here, which is saying a good deal. I have visited a good many hospitals and met a good many men and am perfectly frank in making that statement. I do not want you, gentlemen, to get the idea that every time we run across a fracture we should do an open operation. Not at all, that is the last thing we want to do, and do it only when we have to. This work is in itself almost a specialty. It requires knowledge of detail's and knowledge of asepsis, and skill. These three things are necessary. If you do not apply skill plus the other two things, your work is certainly going to fail.

HEADACHES, CAUSES AND TREATMENT.*

ALLAN EUSTIS, M. D.

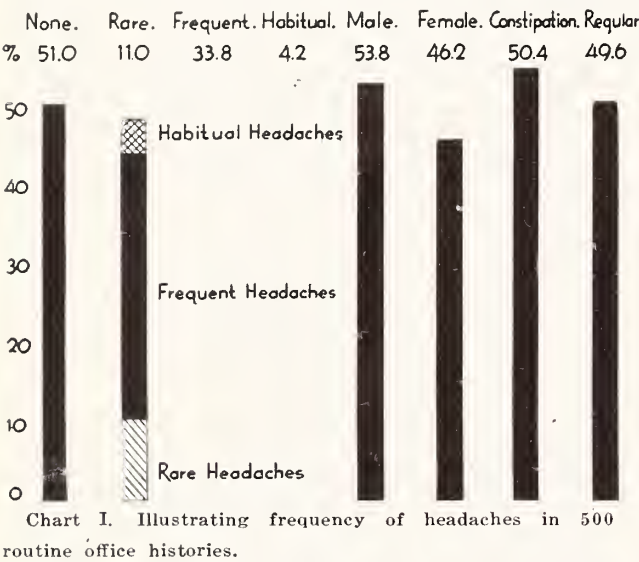
NEW ORLEANS.

Headache is a symptom so universally complained of that it is often ignored, yet frequently the correct diagnosis of a case may be more promptly defined if at once an attempt is made to determine the cause of the headache. As Tilney¹ of New York, so aptly states, "Headache is a symptom and denotes disease. * * * Headache in every aspect is a challenge." I wish further to emphasize this fact and to urge the necessity of a thorough diagnostic investigation before treatment of this symptom is instituted. Too often relief of the symptom is accomplished with subsequent dire results to the patient who continues to suffer from a disease which might have been arrested had its recognition been more prompt. The very commonness of the symptom has made us neglectful of its importance.

In a survey of 500 consecutive cases, (see Chart I below) the histories being

*Read before the Section on Medicine at the Sixty-fifth Annual Session of the Mississippi State Medical Association, Jackson, April 14, 1932.

taken from my office files, and representing ambulatory patients, headache was complained of in 249, or 49 per cent of the cases; 21, or 4.2 per cent of patients coming to my office for routine diagnostic investigation complained of habitual headaches; 169, or 33.8 per cent had frequent headaches, while 55, or 11 per cent occasional headaches. In 255, or 51 per cent, headache was not listed as a complaint, and it is possible that many of these might have overlooked mentioning



this symptom. On account of the generally accepted idea that headaches are of more frequent occurrence in females, than in males, it is of interest to note that 269, or 53.8 per cent, were males and 231, 46.2 per cent, were females. In a statistical study of 250 other patients complaining of headache, 107, or 42.8 per cent, were males and 143, or 57.2 per cent, were females. Grouping the two series we have 750 patients of whom 376, 50.1 per cent, were males and 374, or 49.9 per cent, were females, so, I can but conclude that headaches are as frequent in man as in woman. My work being of a general diagnostic character with no gynecological, obstetrical, or pediatric cases, these statistics are fairly representative of the general run of ambulatory cases.

In a review of the literature on headache, which is monumental, frequent reference is

made to Auerbach's² classification of headaches in his monographs published in 1912 and 1913:

TABLE I

- A—Independent headaches:
 - 1. Migraine
 - 2. Neurasthenia
 - 3. Rheumatic
- B—Headaches with disease in the several organs:
 - 1. With disease of the brain:
 - a Brain tumor
 - b Brain abscess
 - c Hydrocephalus
 - d Meningitis and encephalitis
 - e Hematoma of dura mater
 - f Cerebral lues (progressive paralysis)
 - g Cerebral arterio-sclerosis
 - h Disturbance of cerebral circulation from disease of heart and lungs
 - i Hysteria
 - k Epilepsy
 - l Traumatic
 - m Other brain and spinal cord diseases
 - 2. With disease in the organs of special sense:
 - a Eyes
 - b Nose, pharynx, also teeth
 - c Ears
 - 3. With disease in the gastro-intestinal canal.
 - 4. With disease in the kidneys:
- C—Headaches with general diseases:
 - 1. Infectious diseases
 - 2. Acute and chronic poisoning
 - 3. Constitutional diseases
- D—Combinations of the different forms of headache

Inasmuch as he starts his classification with, "Independent headaches" comprising migraine, the neurasthenic headache and the rheumatic headache,—three cloaks for ignorance in the light of our present day knowledge—it is permissible to present the following classification:

TABLE II

A—Due to lesion in the head:

1. Lesions of the skull:
 - a Gumma
 - b Osteomyelitis, periostitis, Paget's disease
 - c Malignancy
 - d Traumatism
 - e Sinusitis (ethmoids, sphenoids)
 - f Teeth (impacted molars, apical abscess)
2. Lesions within the skull:
 - a Brain (tumor, abscess, lues)
 - b Meninges (encephalitis, hydrocephalus)
 - c Cerebral vessels (hemorrhage, aneurism)
 - d Cranial nerves (Gasserian and sphenopalatine ganglion)
 - e Cerebro-spinal fluid—(spinal puncture)
 - f Cerebro-spinal lues
3. Lesions in organs of special sense:
 - a Eyes (glaucoma, errors of refraction)
 - b Nose (vacuum headache)
 - c Ears (mastoiditis)

B—Due to lesion outside of head:

1. Lesions of abdominal organs:
 - a Gastro-intestinal canal
 - b Liver and gall bladder
 - c Kidneys
2. Lesions of cardio-vascular system:
 - a Arteriosclerosis
 - b Hypertension
3. Lesions of the hemopoietic system and blood stream:
 - a Anemia
 - b Chlorosis
 - c Polycythemia
 - d Infections
4. Lesions of pelvic organs:
 - a Uterus and adnexia (menstrual)
 - b Bladder (retention)
 - c Rectum (impaction)
5. Lesions of the endocrine system:
 - a Hyperthyroidism
 - b Pituitary disease

C—Due to errors in hygiene:

- a Occupational
- b Acute and chronic poisoning
- c Fatigue
- d Hysteria
- e Neurasthenia?

This classification is based upon regional anatomy rather than upon disease, with the idea that if one suspects sinus involvement, roentgen-ray examinations for changes in the bony structure of the skull, in the sella turcica or in the teeth can be observed at the same time, while abdominal investigation will disclose a diseased gall bladder, chronic appendix or dilatation of the duodenum, any of which may be the cause of the headache, and thus indicate the correct line of treatment. It will be noted that allergic headaches and migraine are not included, the explanation being, that in my opinion the former is due to associated intestinal toxemia, the cause for which, in turn must be determined; while the latter, (migraine) is not a clinical entity but is merely a certain type of headache the cause for which can be found in one of the varieties of headaches in this classification. Volumes have been written on migraine and relief of the symptom has been accomplished by duodenal lavage³, injections of peptone⁴, and hosts of other procedures. Bates-Block⁵ under pathological anatomy of migraine lists the several causes of death in autopsied cases as "thrombosis of cerebral vessels, tumor in the neighborhood of third nerve, fibro sarcoma attached to the third nerve, syphilitic or tubercular exudates at the base of the skull, tumor of the pituitary region, and even dilatation of the stomach." It is evident therefore, that migraine is simply a periodic headache, usually hereditary, generally associated with nausea and vomiting, and due to many different causes. It is a symptom as is any other headache, and is not a disease. Many cases in my experience, as also in that of Hunt⁶, are due to the effects of intestinal toxemia. It will be noted also, that an interrogation mark follows "neurasthenia", included for the bene-

fit of those who see such cases. I have not seen a case of "neurasthenia" in the past twenty years, but I can remember many cases so-called in my early practice, which today I would recognize as cases of hyperthyroidism, or other endocrine disturbances. So, I believe, that the sooner this term is changed to "undiagnosed", the shorter the time until the practice of medicine will become a true science rather than an art. Interesting examples of some of the different types of headaches which have been observed may be permissible.

CASE REPORTS

LESIONS OF THE SKULL

Case 1. Carcinoma of the skull: Mrs. B., aged 35 years, first seen by me in 1919 when she was complaining of periodic occipital headaches, associated with nausea and vomiting, scotoma, dysmenorrhoea, and constant gastric distension. These symptoms were promptly relieved after Dr. Allen removed a chronic appendix, a diseased right tube and a cystic right ovary. She remained well until 1923 when Dr. Simmons of Alexandria removed a malignant growth from her right breast, after which she continued in good health and was free from headaches until November, 1927, when there was a recurrence of headaches and some dyspnea was noticed on exertion. I saw her again in March, 1928, when the headaches were excruciating, and there were symptoms of marked cardiac decompensation. On examination a small nodule could be felt on top of the head; it was acutely sensitive and gave the typical appearance in the roentgen ray film of metastatic carcinoma of the skull. Roentgenogram also showed metastasis in the lungs.

Case 2. Chronic Sinusitis (sphenoids, ethmoids, frontal and maxillary): Mrs. G., aged 45 years, in October, 1930 complained of severe headaches and scotoma, the headaches at this time being situated in the occipital region but radiating to both temporal regions; extreme nervousness and a mucous colitis. She had been treated as a neurasthenic for fifteen years. Examination revealed a spastic colon, hemorrhoids and a high grade intestinal toxemia; her urine showing a plus six indican reaction. Basal metabolic rate was minus 35. With thyroxin, a diet to overcome the intestinal putrefaction and colonic flushes, she improved greatly, the headaches recurring only when she failed to follow the diet with reappearance of indicanuria. On December 22, 1930, when she had a slight nasal hemorrhage preceded by severe headache for two days but with negative indican test, she was referred to the late Dr. Lynch who found some

involvement of the right sphenoid. Severe headaches continued notwithstanding local treatment by Dr. Lynch, so on January 7, 1931, he performed a radical operation on the right sphenoid. At operation the floor of the sphenoid was very much thickened with polypoid degeneration of the mucous membrane of the sinus, evidence that infection had been long standing. For a few days she was free from headache until she developed symptoms of infection in the right maxillary sinus which necessitated making an intranasal opening into this sinus with evacuation of pus. After several months lavage and constant attention to the intestinal canal, and withdrawal of an abscessed tooth, she was relieved of headaches. During the summer of 1931, while visiting in Asheville, N. C., she contracted a cold with a return of headaches and Dr. Swan washed out her antrum with recovery of much pus, which was followed by complete relief from headache. She remained fairly free from headaches with frequent lavage of the antrum by Dr. Lejeune, until October 16, 1931, when she had another respiratory infection with a return of severe headache. Very little pus could be washed from the antrum but a roentgenogram of the sinus after the installation of lipiodol showed the cavity almost entirely obliterated by a tumor mass, most probably polypoid, but possibly malignant. On October 26, 1931, a radical operation was done on the right antrum with removal of a large quantity of polypoid material from the cavity. An orbital cellulitis followed, complicated by empyema of the right frontal sinus, again causing severe headache from which there was no relief until a radical operation was performed on the right frontal sinus with evacuation of pus under pressure from this sinus. Convalescence from this operation was accompanied by relief from headaches for a few days only, when pain in the distribution of the supra-orbital nerve became intense. On account of the unstable state of her nervous system it was a great temptation to consider this last headache as of neurotic origin, but careful examination by Dr. Daspit led us to conclude that the supra-orbital nerve was caught in the scar of the incision into the frontal sinus. Section of the nerve by Dr. Isidore Cohn relieved the pain over the distribution of the supra-orbital nerve, but she still complains of headache, which Dr. George Hardin considers is due to the marked muscle imbalance in the right eye. Certainly she has less headache since wearing the corrective glasses, but I am not at all convinced that the present seat of her trouble is not in the Gasserian ganglion involving the optic branch, but not the dental branches. Time only, will establish this fact, when resort to severance of the sensory branches will have to be considered.

This history has been given in such detail as an example of the havoc which may be wrought by treating "neurasthenia."

LESIONS WITHIN THE SKULL

Case 3. Brain Tumor: Mrs. S., aged 53 years, examined January 28, 1928, has complained of headaches for twelve years and for the past four months of acid regurgitation, constipation and gradual loss of vision. At time of examination a chronic gall bladder was found; systolic blood pressure of 230, no palpable arterio-sclerosis, and an excretion of 70 per cent of phenol-sulphonaphthalein in two hours, with a normal blood chemistry. Dr. Bruns found retinal hemorrhages in both eyes with exudate and double choked disc. This should at once have pointed to the possibility of a brain tumor, but on account of the hypertension and the mildness of headaches, which were periodic, the retinal hemorrhages were ascribed to the hypertension. She was allowed to go home and an attempt was made to overcome her hypertension by eliminative treatment and a low protein diet which was successful, the blood pressure ranging from 140 to 160. Her vision, however, became progressively worse and I saw her again two months later, when she was almost totally blind in one eye. A roentgenogram of the sella turcica revealed an erosion of the floor, absorption of the posterior clinoid process and the anterior clinoid processes irregular in outline. Dr. Henderson considered the changes typical of a neoplasm occupying the floor of the middle fossa. This accounted for all of her symptoms, and I now feel that if I had paid more attention to the history of headache for twelve years, together with a proper consideration of the presence of a double choked disc from pressure on the optic chiasm the correct diagnosis could have been made two months sooner. Unfortunately, this would not have prevented her ultimate death from brain tumor.

Case 4. Meningitis: H. R., aged nine years, was referred to me as a case of diabetes with impending coma on account of glycosuria, acetoneuria, agonizing headache and somnolence. When seen the most prominent symptom was the excruciating headache, the boy grasping his head with both hands. Opisthotonos was marked and Kernig's sign positive. Puncture of the spine revealed a pneumococcal meningitis secondary to an otitis media purulenta, which he had suffered from three weeks previous. In this case, I am sure, had the home physician properly evaluated the significance of the headache, other signs would have earlier made the diagnosis clear.

Case 5. Cerebral Hemorrhage: Miss F., aged 15 years, was brought to the Baptist Hospital July 24, 1931, in a semi-comatose condition. The history, obtained from her mother, was that she

had worked the previous night until twelve o'clock and had returned home without complaint. She arose about nine o'clock, cooked and ate an egg for breakfast but soon vomited it. At eleven a. m. she cried out with sudden headache but was able to run upstairs to her bedroom where she collapsed into unconsciousness. I saw her two hours later. Physical examination revealed a well developed young white girl, groaning and in semi-conscious condition. She could be aroused by inhalation of ammonia. No paralysis, but frequent extension and flexion of arms and lower limbs. Pupils were equal and responded to light. Patellar reflexes were normal. Examination otherwise negative. Blood pressure 115/70. A tentative diagnosis of major hysteria was made, but after a catheterized specimen of urine showed large quantities of sugar preparation for spinal puncture was begun. She died before this could be accomplished, three hours after the onset of headache. Autopsy by Dr. Hauser, Coroner, revealed edema of lungs and hemorrhage into the cerebellum and fourth ventricle, coming from a softened area in the cerebellum of broken down tissue, most probably a broken down gumma. No Wassermann or microscopic examination of the tissue was obtainable. This case illustrates the importance of considering any sudden and severe headache as possibly of major import, and when sugar is present in the urine, a spinal puncture should be promptly made, when pure blood, or blood tinged spinal fluid will often be obtained.

LESIONS IN ORGANS OF SPECIAL SENSE

Case 6. Miss G., aged 64 years, first seen by me May 25, 1923, complaining of blindness in right eye, severe headaches for four months. Retinal hemorrhage was diagnosed by oculist seven days previous. Sixteen years before she had suffered from severe headaches which were relieved after Dr. Matas operated upon her gall bladder and removed 38 stones. She had had no severe headaches until four months ago. There were no gastro-intestinal symptoms, blood pressure 175/80, moderate arterio-sclerosis, urine negative except a plus 5 indican reaction. Phenol-sulphonaphthalein excretion was 55 per cent in two hours. Treatment of the intestinal toxemia relieved her of headaches and she remained in excellent health, with a systolic blood pressure of 150 to 175. In 1929 she again began to complain of severe headaches, especially in the left orbital and supra-orbital region, which were relieved after Dr. Buffington removed the eye for an acute glaucoma. I have seen her at infrequent intervals and she has remained free from headaches by constant attention to her intestinal canal, and when last at my office on January 2, 1932, her blood pressure was 170/80, and she rarely had a headache.

HEADACHES DUE TO LESION IN THE NOSE

These are numerous if the sinuses are considered in connection with the nose, an example being Case 2, cited above, but it is well to mention the so-called vacuum headache of Sluder⁷ relieved promptly by shrinkage of the nasal mucosa. Also, may be mentioned headaches due to irritation in the sphenopalatine ganglion, and which closely resembles at times, so-called "migraine." Barlow⁸ reports twelve such cases relieved by the local application of cocaine in the region of the sphenopalatine ganglion followed by application of 50 per cent solution of nitrate of silver.

HEADACHES DUE TO LESION IN ABDOMINAL ORGANS

Gastro-Intestinal Canal—Portis⁹ reports three cases of migraine with dilatation of the duodenum; two relieved by surgery and one by an abdominal belt, and I have seen several, all of whom were surgical cases. A chronic appendix with associated intestinal toxemia is often the causative factor in "sick" headaches, relief of which is prompt after appendectomy. Intestinal toxemia is manifested by headaches, usually occipital in character in 80 per cent of patients suffering from intestinal stasis, as evidenced by a statistical study of 300 cases made by me in 1913. In my experience intestinal toxemia is a contributive factor in practically all headaches, i.e. a patient with a chronic gall bladder, or a chronic sinusitis may be fairly comfortable until absorption of putrefactive material from the intestinal canal may induce an agonizing headache. Treatment of the intestinal toxemia is based upon the pathology present in the intestinal canal¹⁰ assisted by a low protein diet, acidophilus buttermilk, proper exercise and fresh air.

In the literature, many cases of "migraine", reported as relieved, follow the treatment of a case of intestinal toxemia. In the investigation of a headache a test for indican in the urine is as important as examination of the sinuses or eyes, and frequently the latter can be dispensed with when a heavy indicanuria is found with proper eliminative treatment. In a study

of 500 cases taken from my office files, all complaining of headaches, 248 or 49.6 per cent gave a plus 8 indican reaction; 90 or 18 per cent gave a plus 6 indican reaction; 47 or 9.4 per cent gave a plus 5 indican reaction; 45 or 9 per cent gave a plus 4 indican reaction; 44 or 8.8 per cent gave a plus 3 indican reaction; 26 or 5.2 per cent gave a plus 2 indican reaction.

DEGREES OF INDICANURIA —

Plus 8.	Plus 6.	Plus 5.	Plus 4.	Plus 3.	Plus 2.	Male.	Female
% 49.6	18.0	9.4	9.0	8.8	5.2	42.8	57.2



Chart II. Illustrating frequency of Intestinal Toxemia in 500 patients complaining of headaches.

A plus 2, or plus 3 reaction is not considered of clinical significance, but one is at once struck by the fact that 86 per cent of patients complaining of headache, show a plus 4 or heavier reaction for indican in the urine, corresponding fairly well to the percentage (80 per cent) of 300 patients with symptoms of intestinal toxemia who complained of headaches studied several years ago, and who were relieved of their headaches by treatment of the intestinal toxemia.

LIVER AND GALL BLADDER

All headaches which I encounter in which the liver or gall bladder is the offending organ have an associated intestinal toxemia and can retain their diseased gall bladder or liver with freedom from headaches if the intestinal toxemia is controlled, attention to which I called in 1918.¹¹

Time will not permit a consideration of other varieties of headaches listed in the above classification, but under chronic

poisoning we must consider those due to inhalation of illuminating gas. Since the widespread use of natural gas in this section of the country, and on account of its lack of odor, with frequent escape from cooking stoves and heaters this type of headache must be regarded. With the increase of women smokers in the present day, chronic nicotin poisoning must also be considered.

TREATMENT OF HEADACHES

Treatment consists in determining the cause of the headache and removal of same, which often cannot be decided on until a careful history is taken and a thorough diagnostic study made. "The physician who makes a diagnosis of headache without effort to know the cause and offer relief is unjustifiably shirking a tedious problem."⁸

SUMMARY

1. A classification of headaches is presented, based upon regional anatomy, rather than upon the associated disease.

2. Headaches are complained of by 49 per cent of routine office patients in a general diagnostic practice.

3. Headaches are as frequent in men as in women

4. Eighty-six (86) per cent of patients complaining of headaches have an associated intestinal toxemia.

5. A careful history and thorough diagnostic study should be made of every patient complaining of headache.

6. A plea is made to abandon the term "migraine" as a clinical entity, substituting the term "undiagnosed."

The preparation of this article has entailed much labor by my assistants, Miss E. V. Monroe and Miss Bertha Brechtel and grateful acknowledgment is herewith made of their intelligent and helpful cooperation.

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SOME DEDUCTIONS FROM THE PHYSICAL EXAMINATION OF 1,850 INDIVIDUALS.*

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AND

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NEW ORLEANS.

One of the large industrial corporations operating in Louisiana and two neighboring states requires that every applicant for employment satisfactorily pass a physical examination, and last year, in addition to this, gave to a large group of its employees routine health examinations. In making these examinations we decided to go beyond usual routine in order to secure some data that would cover points that had previously interested us. This additional investigation covered particularly the effect of various factors on blood pressure and pulse rate, the status of vaccination and smallpox in the group, and when about half through the series of examinations we had our interest aroused by certain findings in regard to mumps.

BLOOD PRESSURE AND PULSE RATE

The following routine was used:

(1) First class mercury manometers were employed.

(2) Upon entering the office, the applicant was seated and a history taken. This required about three minutes and allowed

*Read before the Orleans Parish Medical Society, November 23, 1931.

an opportunity for the individual to recover from the effort of walking into the office.

(3) Blood pressure and pulse was then taken and recorded.

(4) The general physical examination was made.

(5) Blood pressure and pulse rate were again carefully determined and recorded.

(6) In the examinations for employment the applicant was at first treated in a brusque manner (as is so often the custom of examiners), but later during the examination every effort was made to restore him to a pleasant and comfortable frame of mind. In the routine health examinations, no effort was made to produce any psychic impression but the examinee was treated in a diplomatic way throughout.

We had expected from previous experience that there would be a considerable difference between the data obtained at the beginning and at the close of the examination, as the findings would be affected by the mental state of the one being examined.

The first series was that of 50 applicants for employment. These naturally had their feelings very much involved as their securing a desired position depended upon their passing this examination. The findings were as follows:

DETAIL

Men not over 20 years (11):

Average reduction in systolic pressure	13.09 mm.
Average reduction in diastolic pressure	4.5 mm.
Average reduction in pulse rate	3.2

All systolic readings were reduced except one and this was made after the applicant had been told that he had failed to pass the examination.

All diastolic readings were reduced except three, the only material elevation being in the one who had been told that he had failed to pass.

All pulse readings were reduced except two, both of which were in the case of

persons who had been told that they would not pass.

Men 20 to 30 years: (24)

Average reduction in systolic pressure	12.6 mm
Average reduction in diastolic pressure	6.8 mm
Average reduction in pulse rate	3.7
All systolic readings were reduced but two and they were slightly elevated.	

All diastolic readings were reduced but three and the only one of these that was material was where an abnormally low diastolic reading came up to normal.

All pulse readings were reduced except four—the changes in these four were very slight.

Men over 30 years: (12)

Average reduction in systolic pressure	9.5 mm
Average reduction in diastolic pressure	7.6 mm
Average reduction in pulse rate	1.3

All systolic readings were reduced except one, which showed a slight elevation.

All diastolic readings were reduced except one.

All diastolic readings were reduced except five, which showed slight elevation or no change.

Women: (4)

Average reduction in systolic pressure	13.4 mm
Average reduction in diastolic pressure	2.0 mm
Average reduction in pulse rate	6.0

All systolic readings were reduced.

All diastolic readings were reduced, but two.

All pulse readings were reduced.

Negroes: (2)

Average reduction in systolic pressure	15.0 mm
Average reduction in diastolic pressure	9.0 mm
Average reduction in pulse rate	5.0

All systolic readings were reduced.

All diastolic readings were reduced.

GENERAL FINDINGS

Totals:

There was an average reduction
in systolic pressure of.....12.2 mm

Average reduction in diastolic
pressure 6.4 mm

Average reduction in pulse rate 3.5

Ten per cent showed a reduction in sys-
tolic pressure of 30 mm. or more.

Thirty per cent showed a reduction in
systolic pressure of 20 mm. or more.

Sixty-eight per cent showed a reduction
in systolic pressure of 10 mm. or more.

Following this work on the applicants for
employment, we prepared corresponding
records on 1,800 routine health examina-
tions. In these cases the same psychic
factor did not obtain and there was only
the nervousness incident to any regular
examination.

The gross findings were as follows:

Systolic Pressure:

1,231 showed a decline in the second
reading, as compared to the first;

466 showed an increase;

1 unchanged.

Diastolic Pressure:

654 showed a decline;

462 showed an advance;

679 no appreciable change.

Pulse:

1,344 showed a decline;

359 showed an advance;

97 no appreciable change.

The total reductions in pressure sub-
tracted from the total advance gave for the
whole group the following results:

Decline in systolic pressure.... 3.97 mm

Decline in diastolic pressure.. .42 mm

Decline in pulse343

GENERAL FINDINGS

Of these 1,800 employees, over 17 per
cent showed a change of 10 mm. or over in
systolic blood pressure between the first
and second reading; over 6 per cent showed
20 mm. or more, and over 2 per cent
showed variations of 30 mm. or over. The
detail of this was as follows:

Men Under 30 Years:

Over 17 per cent showed 10 mm. or more
variation of systolic pressure.

Over 12 per cent showed a variation of
10 or more in pulse.

Men Over 30 Years:

Over 16 per cent showed a variation of
10 mm. or more in systolic pressure.

Over 6 per cent showed a variation of 10
in pulse rate.

Women (White and Colored):

Over 29 per cent showed a variation of
10 mm. or more in systolic pressure.

Over 14 per cent showed a variation of
10 or more in the pulse rate.

Negro Men:

Over 22 per cent showed a variation of
10 mm. or more in systolic pressure.

Over 8 per cent showed a variation of
10 or more in pulse rate.

CONCLUSIONS

(1) That one blood pressure reading
and pulse count gives insufficient data on
which to base a determination of the indi-
vidual's normal pressure and pulse rate.

(2) It might be advisable to have all ex-
aminers take a blood pressure reading and
pulse count at the conclusion of an ex-
amination, after effort has been made to
restore the applicant to a normal nervous
balance.

(3) Young men are more susceptible
to change than older men.

(4) Women show slightly more varia-
tion in both blood pressure and pulse than
men.

(5) Negroes showed a wider variation
than whites.

(6) The effect upon the blood pressure
and pulse rate is remarkably effected by
the purpose of the examination and other
factors that influence the mental attitude
of the examinee.

SMALLPOX

In this group of 1,800 health examina-
tions, 107 (nearly 6 per cent) gave a his-
tory of having had smallpox. None pre-
sented positive evidence of having been
successfully vaccinated before having the
disease, though the history in one case was

somewhat uncertain. These 107 cases of smallpox were rather evenly distributed through the past years; therefore, we concluded that smallpox is still an active factor in State medicine and calls for continued efforts by the medical profession looking toward universal vaccination.

MUMPS.

Records were kept in regard to this subject in 866 examinations. Over 600 gave a history of having had the disease. In no instance where the individual had contracted the disease before the age of puberty was there any history of complications. In the case of those who had developed the disease after puberty, 20 showed atrophy of one testicle, 12 on the right, 8 on the left. One showed bilateral atrophy with other evidences of eunochism.

Our conclusion was that until we reach that high plane of national health where epidemic disease is a matter of history only, it is advisable to expose all children to mumps during the period of early childhood.

From a study of the whole series, we were confirmed in our opinion that universal health examinations would prolong life, promote comfort and increase efficiency almost beyond conception.

ASTHMA IN CHILDREN, FROM THE VIEWPOINT OF THE PEDIATRICIAN AND THE GENERAL PRACTITIONER.*

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My purpose in this discussion of asthma in children is not to report any new discoveries but to emphasize the special significance of heredity for the diagnosis and treatment of the condition, and to call attention to the fact that the general subject

of atopy, or allergy, is not so complex that it cannot be comprehended and dealt with intelligently by all who are competent to treat disease.

In any present day discussion of asthma it is virtually impossible to avoid reference to other manifestations of allergy, or atopy. The term asthma was derived from a Greek word meaning "panting." Dorland's¹ definition is that asthma is a disease marked by recurrent attacks of paroxysmal dyspnea, with wheezing cough and a sense of constriction due to spasmodic contraction of the bronchi and irritation of the bronchial mucous membrane. In other words, Dorland classed asthma as a form of neurosis. The present day, or modern definition is that asthma is a disease of definite etiology in most instances characterized by symptom complex of difficult breathing particularly, prolonged expiration, cough and sometimes cyanosis. Nasal symptoms may occur, as in hay fever. In fact, many authors have come to speak of hay fever as asthma of the upper respiratory tract.

As you probably know, von Pirquet² first invented the term "allergy" from the Greek words "altered reactivity." This author intended his word to signify only increased reactivity; later authors, as Deorr³, have included in the meaning of the term conditions of lessened reactivity. By many the word "atopy" is now being used as a term to cover the several inherited conditions of human sensitiveness, such as asthma, hay fever, and most certainly specific eczema.

A peculiar characteristic of many asthmas is their seasonal incidence. In other cases the asthma appears to be initiated by certain environmental conditions, as the proximity of animals. Again, the attack may follow the eating of certain foods. In a large number of cases we find an hereditary taint, frequently deriving through both parents. These various factors, when coordinated, indicate that atopy, or what is generally termed allergy, is involved in practically all asthma.

We have come to accept, therefore, that

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two primary factors determine the asthmatic seizure. One factor is an hereditary tendency to become allergic. The other factor is the allergin or trigger which sets off the loaded gun. The gun is loaded by the physico-chemical imbalance pre-existing in the body cells. Milton Cohen⁴ has drawn an apt simile in a recent article in *Hygeia*. He states that the rash which develops in many people after eating strawberries is due not to any poison *per se* in the strawberries but to a condition in the body of the person who eats them. The rash occurs because the body cells have been so changed that the strawberries act like poison. Such cells are said to be sensitized or in the allergic state of physiologic imbalance. It is well known that if a guinea pig is given a hypodermic injection of egg white no effect is observed; but if a second injection is given 14 days later it will prove fatal. The guinea pig has developed an interim sensitization and a disturbed allergic imbalance to the protein of egg white. Postmortem examination discloses that death was caused by over-distension of the lungs. The guinea pig died of anaphylactic shock. The similarity between the symptoms shown by the guinea pig prior to death of anaphylactic shock and symptoms exhibited by the asthmatic was first pointed out in 1910⁴.

The allergic individual may show a different reaction to each type of stimulus. The reaction may appear in response to a very small stimulus and differ from the toxic action of the allergin when given in large doses. The reactions appear to depend both in site and intensity, upon three factors: first, individual susceptibility; second, specific cellular susceptibility; third, rate of absorption of the allergin. Specific substances that can induce allergic manifestations are called characteristic allergins. To repeat the analogy, the allergin is the trigger to the gun. These allergins enter the body spontaneously in four ways; through the mouth and nose during breathing; through the digestive tract; through the skin; and by bacterial infection. The

deliberate injection of antitoxin does not induce true allergy, but sometimes anaphylaxis.

I have been asked whether the older term "exudative diathesis" is not as significant and descriptive as the more modern phrases "physico-chemical imbalance" or "allergic imbalance." I see no reason why it is not just as clear in every respect. The important concept to be kept clearly in mind in the use of either expression is that there must be first a definite cellular imbalance before the various manifestations of anaphylaxis or sensitivity can occur. The normal individual, in physico-chemical, or allergic, balance, can withstand any or all allergins with no untoward results.

CHART I

AGE INCIDENCE OF ASTHMA	
Years	Per Cent
0-10	33.7
10-20	14.1
20-30	17.5
30-40	16.3
40-50	10.5
50-60	5.7
Over 60	2.1

The subject of asthma is of special interest in children because of the age incidence. As is shown in Chart I, 33.7 per cent of all asthmas are manifested during the first ten years of life. As the child grows older the susceptibility or age incidence decreases, until after 60 years only 2.2 per cent develop asthma.

As to hereditary predisposition, there is a known positive family history of allergy in 70 per cent of the asthma in children. In 50 per cent of the cases the positive family history is unilateral; in 20 per cent, the inheritance is bilateral. Furthermore, the family history cannot always be relied upon as negative because the parents have never evidenced allergic manifestations. In some instances the parents may be allergic individuals who, up to the time the child is affected, have never received the stimulus necessary to produce disturbances of this type in themselves. In other words, an

actual bilateral transmission of allergic imbalance might not be obvious.

Transmission appears to be twice as frequent through the female as through the male, the diathesis being transmitted as a mendelian dominant. It is interesting, also, that the larger the inheritance the greater the tendency to multiple sensitization and earlier manifestation of symptoms. The localization of symptoms, however, bears little relationship to the character of inheritance.

SENSITIVITY

The infant may become actively sensitized *in utero* through the mother's over-indulgence in certain protein foods during the ante-parturition period. Also, while being fed on the breast the infant may exhibit some symptoms of hypersensitivity which disappears after removal of a certain protein from the mother's diet. Proof exists that foreign proteins are able from birth to pass unchanged into the circulation through the normal alimentary mucosa. It is an interesting fact that the asthmatic may show four plus reaction to food tests as well as four plus reaction to inhalants; but when the various irritants affecting the respiratory tract have been removed, or resistance to these inhalants raised by injection or other means, the four plus foods may produce no symptoms whatever. This fact may indicate that the allergin which produces symptoms comes mainly through the upper respiratory mucous membrane, or merely that with relief in one direction the food allergins alone do not exceed the resistance threshold of the organism. The second alternative is the more hopeful one, since it suggests the possibility of full relief with removal of only a part of the allergin load.

Pathological conditions of mucosa, stomach, and bowels may impair the contractibility of these parts so as to allow foreign proteins to pass unchanged into the blood. Mucous membrane permeability may vary with the seasons; particularly, wet and cold weather may increase the membrane permeability. Previous illness appears to play

a part. There are at least three conditions in which the relationship between infection and allergy is demonstrated. An acute infection often ushers in a sensitivity, and the dormant allergic state becomes active because of lowered resistance. Again, in the absence of known hereditary influence sensitivity development begins in a damaged state of mucous membrane. Finally, because of the allergy there is more susceptibility to infection. Something of a vicious circle may be instituted, the mucous membrane of the allergic becoming constantly irritated by specific proteins.

The nose and throat of the asthmatic child play their part. In a very large percentage of asthmatic children the tonsils have been removed. Most observers believe that tonsils and adenoids have little to do with the development or cause of asthma. Sinus disease is a frequent complication. Some authors hold that sinus disease is the result of allergy and not the cause. In a recent discussion⁵ Dr. Dean of St. Louis stated that allergy could cause sinus disease, and that where smears of the discharge of infected sinuses in an infant show 10 per cent of eosinophiles allergy is an important causative factor. The majority of authors believe that there should be no difference in the treatment of infected sinuses of the asthmatic and non-asthmatic. In other words, removal of foci of infection is as beneficial if not more so to the asthmatic as to the normal child. While we cannot say that drainage of the sinuses will cure an asthmatic child, we can say with assurance that a child with chronically diseased sinuses stands a poorer chance of ridding itself of asthma.

Peshkin⁶ in a series of cases from the asthma clinic of Mt. Sinai Hospital, New York, found a very large percentage of definite asthmatics. He reports that the incidence of tuberculosis in these asthmatics approximates the normal ratio, and the intradermal test gave no more positive reactions in the asthmatic than in normal children living under the same hygienic conditions.

SYMPTOMS

Before considering in more detail the symptoms of asthma, something should be said of the prodromals seen in the allergic child. One of these is eczema of the skin, sometimes a simple urticaria, sometimes a congenital ichthyosis. The symptoms come on quite early. In a large percentage of cases the eczema baby later becomes asthmatic. There are symptoms of the upper respiratory passages; itching of the nose; snuffling; rhinitis, and sneezing. The lower respiratory tract may also manifest such symptoms as rapid breathing, wheezing cough, repeated colds. The alimentary tract reflects food idiosyncrasies, irregular appetite, abdominal pain, vomiting, diarrhea, train or car sickness. The nervous system is involved in symptoms of irritability, restlessness, insomnia, sick headache. The general symptoms of the genito-urinary tract are straining, frequent urination, enuresis or diuresis. Any or all of these symptoms are suggestive of allergy.

A great deal is said about the appearance of the asthmatic child. In the older asthmatic there is usually a cyanotic tinge of the lips, widening of alae nasi on inspiration, frequent paranasal depression, with the chest increased in anterior and posterior diameter. Often the pigeon breast and sometimes the dorsal kyphosis is present.

It has been my experience that the child with fair hair and blue eyes is somewhat more commonly affected with asthma and eczema. In this type there is a strong hereditary predisposition with very often positive skin tests. The brunette more often shows an asthmatic bronchitis following a severe illness, when the hereditary history is not so obvious.

The capriciousness of asthma is a matter of common experience. The time of onset is usually in the early hours of the morning, and it is a peculiar fact that once a definite hour is established it becomes fixed. This may be due to pollens. There is also the week-end periodicity. During the week the child is in school, under reg-

ular regime, and probably less exposed to grasses and pollens.

Locality frequently has a very marked effect upon the asthmatic; sometimes a change from one locality to another will clear up the condition. Winter is commonly the season when most asthmatics are seen. Another fact of interest is that symptoms shown in one attack may differ very materially from those of a subsequent attack.

In the early literature the French refer to the asthmatic child as "superier degeneri," or "superior degenerate," because so many are brilliant in school work yet lack the stability and are not so dependable in habits as their less brilliant brothers.

It is appropriate here to cite the five distinct types of asthma as described by Bray⁷ of London.

1. *Acute Bronchitic Type of Asthma.* The clinical picture in this type resembles closely bronchial pneumonia, or bronchitis, which comes on with great suddenness. The attack begins with frequent, paroxysmal sneezing. The temperature is often elevated two degrees or more. There is a persistent, hard cough, and sometimes a cyanosis which is more or less alarming. Physical examination reveals markedly prolonged expiration. Usually many rales of all types are heard, generally over the chest. These symptoms may be of brief duration or run a typical course of bronchitis. A feature more or less characteristic is that the attacks are recurrent.

2. *Asthmatic Bronchitis, or Bronchitis with Superadded Asthma.* This type of asthma usually follows an ordinary respiratory infection or an exanthem, and each subsequent attack or series of attacks is ushered in by a cold in the head. This is the severe type and occurs usually in the winter when bronchial infections are most prevalent. It is the type of recurrent bronchitis so often seen in the young child. Dyspnea usually appears in from 24 to 48 hours after the cough. Secretion is usually abundant. Auscultation detects pro-

longed expiration, accompanied by whistling rales in all portions of the chest. Very often the child is relieved by vomiting a large amount of mucus. Sometimes the attacks may last for weeks. Relapses are very frequent. It is very difficult to elicit positive skin tests in this type of asthma.

3. *Bronchial Asthma.* This is more of a true asthma and is rarely seen before the fifth year. The true bronchial asthmatic attack usually begins at night, the victim awakening with a stuffy, suffocative feeling, and clinging to the back of the bed for support. Dyspnea is intense, with little or no cough. Expiration is difficult. The face has a pale, anxious look. When the attack begins the subsequent rales begin to appear. Periodicity is characteristic. Often there is little cessation between attacks. In other instances bronchitis may supervene. The skin tests are usually easy to elicit, but are not of practical importance.

4. *Coryza Asthma, or the Hay Fever Type.* According to both Bray⁷ and Scheppegrell, 5 per cent of attacks of hay fever come on before the fifth year and are not recognized, being mistaken for simple colds. True hay fever, seen during the summer and autumn, is due to pollens, odors, or emanations, and does not occur before the fourth year. Coryza asthma is characterized by itching of the nose, watery nasal discharge, and violent sneezing followed by difficult breathing.

5. *So-Called Asthma, Eczema Syndrome.* This occurs in early childhood, and is seen chiefly upon the face and the flexures of the arms and legs. Sometimes there are complications of dry, ichthyotic skin. In the fat child the lesions may assume more of a weepy character. In spite of treatment, as a rule these manifestations remain for about two or three years improving in summer and getting worse in cold weather. There is also a non-seasonal tendency to improve and relapse. About 75 per cent of such cases subsequently develop asthmatic tendencies. In our experience the skin is very sensitive and often even a pos-

itive skin test can not be relied upon. Occasionally, however, when the skin is free from eruptions, both the scratch and intradermal tests may give valuable evidence.

Blood findings in children are not characteristic, but usually eosinophils are present during the free interval. The eosinophil count averages between 5 and 10 per cent. The sputum is not characteristic. As described for some types, the sputum is thick and tenacious; in other cases it may be very scanty and thin. Sometimes during an attack the sputum may first be thin and later thick, showing spirals and crystals. Gastric analysis frequently reveals hypochlorhydria.

TREATMENT

Treatment of asthma is based upon two considerations. First, it should be determined whether an allergic tendency exists, that is, whether the individual is in a state of allergic imbalance. This can be ascertained by including in the history careful questions as to the occurrence of early eczema, hay fever, or recurrent bronchitis in the patient, parents, and even in the more remote relatives. While I do not believe that everything is allergic, I do think that many allergic conditions are missed because of careless history. As I have stated before in this paper, many minor symptoms which certainly can not be classified as asthma are forerunners of this condition, and by early relief of the allergic imbalance of which we are thus forewarned we may often avoid the more untoward later symptoms.

Secondly, after allergy is definitely determined, we must locate the trigger or allergin. The loaded gun is not harmful until the trigger is pulled. Various considerations affect our search for the allergin. It must be remembered that lowered resistance may allow a small dose of allergin to be effective, and that repeated small or homeopathic doses may finally discharge the gun. The allergin is usually detected in one of several ways. Often the offending substance may be eradicated simply by careful observation and analysis of the pa-

tient's diet and exposure to pollens and animal dander preceding each attack. Next, we have the skin tests. Many things might be said regarding skin testing in children. Some authors have definitely stated that children react more frequently to food allergins than do adults; as the child becomes older, other factors, as pollens and dander, become more important as causative agents. Detwiler⁸ claims that 4.5 per cent of the asthmas which begin in infancy yield positive skin tests; in later childhood and in young adults, the percentages are 66 to 50, respectively; whereas in asthmatics which develop the condition after age 45, skin tests are practically negative.

All observers agree that the intradermal technique of skin testing is most conclusive. However, because of the possibility of an existing marked sensitization, the intradermal procedure is fraught with dangers. Furthermore, the scratch method is more practicable in infants and children and suffices to detect most of the sensitizations. Intradermal testing can then be resorted to for confirmation of doubtful reactions and suspected proteins that give negative scratch tests. An attack of asthma may of itself so desensitize a child that for a time negative tests are obtained with allergins which subsequently produce positive reactions. This spontaneous desensitization does not last very long; in fact, its period may be estimated from the interval between attacks.

There is necessarily a great deal of individualism in interpreting skin tests in children. The reading, to be reliable, should be done by one person who is well acquainted with his own technique and has a definite plan for reading. Unfortunately, too much dependence has been placed upon the skin reaction when the tests have been made and read in careless manner by individuals who are not capable of carrying out the technique properly. Even when the testing is done expertly, in our experience the findings are not always substantiated by clinical results. The intradermal technique is undoubtedly more exact than the

scratch method, but either procedure of skin testing is only an additional method of diagnosis not to be relied upon to the exclusion of careful observation, exacting history, and precise physical examination. All together are of great value.

The first objective of treatment should probably be considered as prophylaxis. All eczema, prurigo, itching, continued and recurrent bronchitis, prolonged coryza, or recurrent intestinal symptoms, should be suspected as potential asthma. An inquisitive history will often locate the offending agent. Perennial hay fever or asthma indicates a constant association with a responsible environment. Seasonal hay fever or asthma is due to pollens. Occasional attacks suggest contact with such offending and chance agencies as animal emanations or uncommon foods.

Again quoting Peshkin⁶, he reports some 200 cases of asthma who failed to respond to any and all methods of treatment until removed to a seaside hospital. With changed environment and different surroundings, but without other change in treatment, all but 5 per cent showed immediate improvement. We have all had in our own practice the case which showed no improvement at home in spite of our best efforts, but, when the child was removed to the hospital, where there were no draperies and little furniture, improvement was immediate and as a rule continued during the hospitalization.

With regard to diet, the first obvious act is to eliminate all foods which have been proved either by clinical observation or skin sensitization tests. It has been shown that a diet whose ketogenic-ketolytic ratio is about 3:1 sometimes appears to have a beneficial effect upon the young asthmatic. Sometimes the ratio is increased even further to the point where acetone bodies are found almost constantly in the urine.

Treatment by means of injections of vaccines and various pollen extracts belongs to the field of the allergist and will not be discussed here beyond saying that frequent-

ly such treatments are beneficial. Promiscuous vaccine and pollen extract therapy is not only valueless but may be harmful.

There are certainly cases where the sensitivity is due to some form of bacteria. It is in this type of case that we have had our best results. The vaccine to be employed is best made by one of two methods. In one, some of the secretion from the sinuses, throat, or upper respiratory passages is used to make a growth upon the patient's own blood by the so-called Solak-Meyer-Cohen method. In the other, the secretion is grown upon ordinary culture media; each organism is plated out separately; an extract is made of each growth, and tested by the intradermal method. The vaccine is then compounded from all the various organisms to which the patient proves susceptible. This vaccine is given in increasing doses over a long period of time. In our own practice we have seen some very beneficial results from this mode of therapy.

With absolute cooperation by the patient and patience on the part of the physician, careful preliminary study and accurate testing with potent extracts will give good results in more than 75 per cent of asthmatics. At least six months observation will be required to control all the causes responsible for the asthma in some children. For immediate, paroxysmal relief it is unnecessary to tell this assembly that the two drugs of main value are adrenalin and ephedrine; other palliative treatment is symptomatic.

CONCLUSIONS

From the viewpoint of the pediatricist and the general practitioner:

1. Allergy plays a very important part in the asthma of children.
2. The hereditary influence, or atopy, is often neglected in the diagnosis because a proper history is not taken.
3. Asthma is not the only manifestation of allergy in children.
4. Eczema, urticaria, intestinal symptoms, often difficult feeding cases, may be the manifestation.

5. The scratch and intradermal tests are of value as diagnostic aids, but they should not alone determine the diagnosis.

6. Many allergic individuals go through life without symptoms because they never receive a threshold dose of the allergin.

7. Much can be accomplished by proper diagnosis. Accurately diagnosed cases are improved by avoiding the offending allergin or by raising resistance to this allergin by vaccines or other procedures.

8. Every practitioner should understand at least the principles of allergy.

9. Asthma particularly, and all other allergic manifestations in the child should never be considered entirely cured. There may be a remission of symptoms for years, and then a recurrence of the condition with increased intensity.

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INDISCRIMINATE MYRINGOTOMY.*

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The indiscriminate incising of the drum membrane, without comprehending the important factors indicating such a procedure, has brought about enough casualties to make us realize that injudicious myringotomy has no place in otology.

The general practitioner and modern pediatricist are confronted with aural problems in routine practice, and should be com-

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petent to distinguish and interpret middle ear conditions if they intend to assume the responsibility, or concede their limitations, and cooperate with the aurist, to depict a more rational plan of treatment.

The paramount significance in distinguishing between a surgical ear, and one which does not incur operative interference, is the ability to make an accurate diagnosis, from which is born intelligent treatment and competent prognosis.

From the standpoint of practical otology, we will consider acute middle ear inflammation under two clinical heads, namely acute catarrhal otitis media and acute suppurative otitis media.

The primary incident in the development of the catarrh is to be found in the nasopharynx. Due to the influence of an acute, or chronic inflammation of the mucosa of the nasopharynx, there results a loss of patency of the Eustachian tube, and a subsequent interference with the aeration of the tympanic cavity. This insufficient aeration in the middle ear results in a decrease in the intratympanic pressure, so that it becomes less than normal. Consequently the drum is at first drawn toward the middle ear by the negative pressure, its capillaries dilate and there is presented a red, retracted drumhead. There now occurs a transudation of serum from the blood vessels and lymph spaces of the tympanum in order to compensate for the existing negative pressure. The drum rapidly returns to its normal position, the engorgement disappears and there now can be seen a pale, translucent, drum through which one very often sees a shifting line of fluid. This transudate is sterile. It is never found in excess of the capacity of the tympanic cavity, and consequently it is never the cause of a bulging drumhead. Moreover, it is further to be distinguished from an exudate in the tympanic cavity, in that it is the result of a mechanical condition, while an exudate is the result of bacterial activity, and is found whenever a patient presents a bulging drumhead.

Contrasting the catarrhal type with the more frequent acute suppurative otitis media, whose lesion has its seat in the tympanic cavity, and is the result of bacterial activity, producing the reactionary phenomena typical of abscess formation. The lining mucous membrane becomes swollen and infiltrated. The exudate, formed as the result of the inflammation, is thrown into the tympanic cavity and is produced, in excess of the capacity of this space to hold it. As all of the walls of the tympanum are rigid with the exception of the outer one which is formed by the membrana tympani, the latter yields to the pressure and bulges outward. This bulging of the drum is always seen at the beginning of the attack and continues to exist until relieved either by spontaneous rupture of the drumhead, or an incision through it.

The prodromal symptoms common to both: fullness, tinnitus, and deafness, associated with pain and fever are a matter of subjective variations, depending on the virulency of the infection, and the age of the individual. Fever is a very unreliable symptom. If it ranges much above normal, or if it be distinctly remittent and subject to exacerbations, the attendant, of course will regard it according to its value in arriving at a diagnosis.

Ordinarily, fever occurs much oftener in children than in adults, and is usually higher. Pain, in the catarrhal inflammation, is not as severe as in the suppurative type and is expressed by the infant in restlessness, tossing, crying, and pulling at the ears. In children, and adults, the severity of pain depends on the amount of pressure, and the temperament of the patient.

Diagnosis primarily depends on an otoscopic examination facilitated by a clean canal, and adequate illumination. Children and adults are favored by a large meatus. In the infant this procedure at times is very difficult, on account of the infantile duct consisting only of a membranous part which narrows as it approaches the tympanic membrane. The drum inclines out-

ward so that the posterior superior part is closer to the eye. Its color is faintly pink, more exaggerated on crying.

The appearance of the drum membrane in the catarrhal type varies with the stage of the disease. At the onset, the drum is reddish and retracted, the light reflex is distorted or absent. The malleus handle inclines toward the promontory appearing foreshortened. The processus brevis, with anterior and posterior folds, are prominent. The transudate may be observed and its level definable. The exudate is commensurate with the amount of negative pressure and as it increases it does not produce a bulging drum—therefore contra-indicating myringotomy. An incision in these cases provides an inlet for infection and so changes a mild disease into a potentially dangerous one.

The otoscopic picture of the drum in suppurative otitis will vary, according to whether a perforation has occurred or not. Before perforation, the first changes to be noted in the membrane are injection of the handle of the malleus and a slight hyperemia to the drum at its upper pole. As the condition progresses the membrane loses its polish. The hyperemia becoming generalized, and the drum bulges obscuring the land marks. After rupture of the membrane the meatus is filled with pus, which when removed reveals a pulsating spot of light, visualizing the exuding pus through the small perforation. Relief of pain and decline of temperature usually follows.

In the treatment of these cases it has been repeatedly emphasized, that the prompt surgical measures are the most effective ones that can be employed, and that an early incision in the drum, is an essential requisite, for the prevention of the further spread of the inflammatory process.

By this means an exit for any possible exudate is provided, and the patient is given the best chance to escape needless pain, chronic suppuration, mastoiditis, and other more serious consequences. It has also been

emphasized that to wait for a spontaneous perforation is inexcusable, that the opening so made is seldom sufficient to give adequate drainage, and that such perforation usually occurs too late to prevent serious complications.

An incision properly performed is practically without risk and, if the inflammatory process is not severe, the drum membrane has a tendency to heal rapidly. With an early incision therefore, there is much to gain, and little to lose.

In conclusion, then, it cannot be overestimated that the indiscriminate practice, of opening drums, by those not conversant with the underlying pathology, is to be condemned. That it is necessary to distinguish the principal phases of otitis media, namely the acute catarrhal and the acute suppurative, and depending upon an accurate differentiation of these depends the treatment. The catarrhal type contra-indicates myringotomy; the suppurating type demands immediate incision.

DISCUSSION.

Dr. J. J. Irwin (New Orleans): Dr. Brown has covered this subject so thoroughly that there is little for me to add to what he has said, with the exception of stressing a few points.

Myringotomy is done for the purpose of relieving tension in the middle ear that is caused by serum or pus and not as a prophylactic measure, as some claim it should be done. When I speak of the middle ear I speak of that part of the ear back of the drum, the tympanic cavity proper, not the Eustachian tube or the drum membrane.

Myringotomy should be done early when indicated, and is best done under a general anesthetic. I personally like to use gas. Some use ethyl chlorid. Ethyl chlorid may be a very good anesthetic in the hands of a very competent anesthetist, but for anyone to employ the use of ethyl chlorid without having had much experience with it may have some grief.

In regard to myringotomy, the after treatment is of very great importance. When I say the after treatment I mean the way the ear is taken care of, not only the ear itself but we must consider that we have to look after the nose, the nasopharynx, as well as taking care of the ear.

Some men like to irrigate the ear immediately after a drum has been opened with a warm boracic acid solution or saline solution or any other solution you may choose to use. I personally be-

lieve where there is a thin serous discharge, a little serum and a little blood without any thick pus, it is best not to wash that type of ear but dry it with cotton. Where it becomes the suppurative type with profuse discharge, it is better to wash the ear and it should be washed often, say every three or four hours.

In regard to who should open ear drums and who should not open ear drums, it is a mighty hard statement to make to say that one man should open and another should not. Because a man is not an ear, nose and throat specialist is no reason why he should not open a drum if he is trained to do so. Of course a lot of men are not trained in that special branch of surgery, as it requires a certain amount of skill to be able to open an ear drum.

The first essential thing is the proper use of the head mirror and a good light.

Concerning the type of knife to use, some of us use a cutting knife and others use a knife that you plunge through the drum and make a sort of V-shaped incision, which is a very good procedure I think. I think this type of knife is especially good in the hands of someone not doing this work daily and who has not had the opportunity to keep his hand in.

When opening an ear drum it is best to start in the posterior-inferior quadrant, make a curvilinear incision and make it wide. This as a rule seems to help the condition, to clear up much faster. Then, again, drums that are punctured seem to do as well as those in which you have made the large incision. Of course it depends on the individual case and the type of infection we are dealing with.

Dr. Homer Dupuy (New Orleans): Myringotomy does more than drain the middle ear. It helps drain the mastoid antrum, that large cell which is anatomically related to the middle ear. By contiguity of parts this antrum is always involved in every acute suppurative infection of the ear. Timely myringotomy may abort mastoiditis. Then what are the indications for this operation? Severe earache, fever, pain on pressure over mastoid antrum, with these symptoms lasting over twelve hours, myringotomy is unquestionably indicated. The obstructive Eustachian tube type, slight earache, diminished hearing, calls for nose, throat treatments with air introduction through Eustachian tube. Myringotomy here would be indiscriminate practice. There seems some wisdom in the advice: better a myringotomy too early than too late.

Dr. S. M. Blackshear (New Orleans): There is no doubt that drums are unnecessarily opened at times, and also there are times when the drums should be opened when they are not. I have not infrequently seen tympanic membranes with con-

siderable bulging of the upper part, known as Schrapnel's membrane, and the lower part gray, caused by occlusion of the Eustachian tube. In this condition, the patient will hear a watch at a short distance from his ear, whereas, if an abscess is present, he will not be able to hear the watch on that side. On the other hand, I have seen cases, especially in young children, with perfectly gray drums and apparently no bulging in which suppuration is present. However, in these cases severe otalgia, and oftentimes high temperature, are to be found, and unless tympanotomy is done, severe complications may result. I have also noted a characteristic cry in cases of otitis media, where the child is too young to tell where his pain is. It is a kind of sign language that I have often noted in such cases. Attention to the nose and naso-pharynx (astringent sprays and applications of the silver solutions to the naso-pharynx) is sufficient to clear up the condition, which is due to Eustachian salpingitis. Inflation of the middle ear should be done with great care, or not at all in these acute ear afflictions.

Dr. M. P. Boebinger (New Orleans): Some years ago, I published a paper and tried to bring out the use of nasal irrigations with the very young in the recumbent position with the head extended at an angle of about forty-five. My reason for reading that paper was because I thought in many instances we could abort middle ear infections.

Invariably the history reads about like this: Acute coryza, an adenitis, a tonsilitis, or as the mother usually calls it merely a cold in the head. If you see the patient early enough and irrigate with a normal saline rather warm you will abort middle ear infection in many instances, more especially if you will wait about an hour, put the patient back in the same position and then use silver nitrate solution, not over one-quarter of one per cent. Follow that up by postnasal applications of silver nitrate 10 per cent to 25 per cent.

I want to stop here, gentlemen, and condemn the use of the iodized phenol. I think it is worthless.

I believe a considerable amount of skill is necessary in the myringotomy. One should be at least skilled in the use of the knife. He must have a fair knowledge of his anatomy. Recently I did a myringotomy on a patient and my first experience got me up about two o'clock in the morning. The mother telephoned me that the baby's ear was bleeding profusely. I couldn't conceive for the life of me what happened. Going back to my anatomy, however, I believe I can safely answer the question. In many cases you will find a large jugular bulb extending up in the floor of the middle ear. In other cases there is a possibility of a dehiscence or anatomi-

cal abnormality. Through inexperience or the rough handling of the knife, more especially when you are using local anesthesia, you may drive the blade of the knife too deeply, and as you know you have quite a plexus on the posterior wall of the middle ear, venous and arterial.

I have made it a rule to make multiple incisions even though my bulging tells me to incise there. We should make otoscopic examination. We should not guess. To guess is dangerous. If necessary to open a drum, all things being equal when you are in doubt, open. If a drum is opened under aseptic conditions and precaution is taken there is very little harm that comes from it, but I believe it is dangerous to wait.

I repeat, gentlemen, before closing, in order to avoid complications, as Dr. Dupuy brought out, when in doubt open the drum.

LIFE AND DEATH IN THE MEDICAL PROFESSION—The average doctor's life is hard. Physically, because of constant demands and exposure to every conceivable condition, it is probably the most trying professional pursuit. Intellectually, it is most exacting, because of its constant demands upon the mental faculties, due to the rapid progress in medical science, while, emotionally, it is harassing in the extreme, because of its pressure upon the sympathies and the conscience. Constantly confronted with questions of life, death and suffering, the doctor carries burdens often far beyond his strength. Socially, he knows little of freedom and leisure for human intercourse, because of the constant interruptions due to the doctor's calling, a servant ministering to the frailties of mankind. Economically, he is only too often heavily pressed by financial cares, since the average net yield of the doctor's calling is far from what it is often supposed to be.

According to a report by Dr. R. G. Leland, of the American Medical Association, the average gross income of 6328 physicians in 1928 was \$9764, ranging from \$5289, during the first five years of practice, to a maximum of \$11,731, during the years from the fifteenth to the nineteenth of practise, after which the gross income declined to \$4609, for fifty years of practise or more. These are gross incomes and therefore subject often to very substantial reductions before the net incomes are determined. But it is safe to assume that after taking all the facts into consideration the average net income of practising physicians throughout the country ranges between \$5000 and \$6000 per annum. The income is apparently at its best in surgery, Roentgenology and orthopedics. It is least in public health, tuberculosis, teaching and

Dr. Joseph P. Brown (Monroe, La.): There seems to be some misunderstanding as to the definition of indiscriminate myringotomy. The way I interpreted it for this paper was that drums are being opened promiscuously by men who are not skilled in this particular field. They don't know what they are doing. As Dr. Boebinger stated, they get a drum and don't have anything but a knife and a flashlight. They pull the ear back and make a stab with no regard to the anatomy or contents of the internal ear.

As to Dr. Dupuy's remarks, indications for myringotomy were brought out in describing the pathology. Myringotomy is a simple procedure but it is often performed carelessly and without regard to the possible end result.

On the main remarks, I believe we are in accord. I wish to thank the men for their liberal discussion.

physical therapy. The doctor, in response to public opinion, is required to maintain a relatively high standard of life. Whether he wishes it or not, he must often live beyond his means to sustain the honor and the dignity of the profession. He must belong to several medical societies, social clubs, etc., must keep a car and attend conventions, all of which are additional burdens not common to many other professions. Hence, the stress and strain of the doctor's life unquestionably bear heavily upon his average duration of life and his powers of disease-resistance in chronic affections of adult life.

A physician engaged in the healing art, with his thoughts concentrated upon his patients, has little time for himself or for the application of his knowledge to his own needs. Medical literature, unfortunately, is almost barren of useful discussions on the health problems and diseases of physicians, urgent as the necessity must appear to those who have given extended thought to the question. It is true that the *Journal of the American Medical Association* publishes annually a brief analysis of the causes of death in the medical profession, but this discussion is of small practical value and only of limited interest, in view of the unfortunate manner in which the data are presented. They are comparable from year to year with great difficulty and leave much to be desired in matters of detail. They start with a grievous statistical error, in that they are not a tabulation of deaths but rather a tabulation of causes of death, multiple causes being separately considered instead of being classified in accordance with international usage dealing with joint causes. How this works out in actual practise is not clearly deducible from the figures as published.—Frederick L. Hoffman, M. D.

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THE HISTORY OF DIPHTHERIA

Diphtheria has been known since ancient times. It is obvious that a disease with definite visible lesions would early obtain nosographic significance. Diphtheria was recognized undoubtedly at the time of Hippocrates, who, after all, represents more an individual who assembled facts about disease already known rather than a keen investigator. The most definite information about diphtheria dates from the time of Aretaeus, who flourished in the second century. In describing ulceration about the tonsils as well as ulcers appearing on the tonsils, the description of

these ulcers, with their subsequent development, is that of untreated diphtheria. Aretaeus also described the paralysis of the palate which occurs as an occasional complication of the disease. Aetius of Amida, who lived in the sixth century, left a splendid compilation spoken of as the *Tetrabiblos*. In this work he described epidemic diphtheria, much as did Aretaeus. From these ancient times up until a century and a half ago, the principal references of importance to diphtheria are concerned with various epidemics which occurred at varying intervals. The epidemics in the Iberian Peninsula, occurring continuously from 1583 to 1618, again in 1630 and 1645 and 1666, are especially noteworthy on account of the excellent clinical descriptions of the disease by the Spanish physicians of that epoch. These epidemics spread to Italy and Sicily. Courtesius of Messina (1625) recognized the contagiousness of the disease. In 1747 and 1748 Cremona suffered a severe epidemic which was the occasion of the recognition by Ghisi (1749) of the paralytic phenomenon associated with diphtheria. The epidemics of Spain and Italy spread to Britain and France, as well as to the more northern European countries. In America there was a severe epidemic in 1735-36. Up to the beginning of the nineteenth century, the most outstanding study of the disease in this country was that of Bard, Professor of the Practice of Physics at King's College, who described suffocation angina. He performed autopsies on these patients and reported the infective nature of the disease. Diphtheria at that time was known as croup, and true croup and the croup of diphtheria were not differentiated. It was not until the investigative work of Bretonneau, published between 1821 and 1826, that the word diphtheria began to be employed.

Interest in the disease by the French clinicians and French students of medicine was aroused largely through the influence of Napoleon Bonaparte. The catholicity of the interests of this great Corsican,

who could simultaneously revise civil laws, plan surpassing engineering enterprises, carry on war, introduce currency reforms, suggest agricultural improvements and, in fact, accomplish almost everything, is further evidenced by the fact that it was he who was responsible for this awakened interest in the disease through a prize of 12,000 francs offered for the best work on the subject of croup. This came about as the result of the death from this disease of the eldest son of Louis Bonaparte. Bretonneau, in his *Traite de la diphtherite*, produced a medical classic which ranks among the greatest of all time. His work came out in four different memoirs and is a magnificent example of thorough clinical investigation. To him belongs the credit of definitely showing that diphtheria is a specific disease. In 1855 he published a final memoir, *Sur les moyens de prevenir le developpement et le progres de la diphtherie*. It should be noted that this is the first time the word diphtheria was printed as such.

Fourteen years later Trendelenburg first successfully transmitted the disease from man to animals. Previous to this time several attempts had been made to transmit it from man to man. In 1883, Klebs described the "micrococci of diphtheritis," but it remained for Loeffler, in 1884, to isolate and describe fully *Bacillus diphtheriae*, in a publication which is spoken of as one of the classics of bacteriologic science.

The next great contribution to the knowledge of the disease emanated from France. Roux and Yersin (1888) discovered that the organism excreted an exotoxin which is capable of producing in animals when injected, symptoms identical with those of diphtheria. Roux and Yersin also laid great stress upon the methods of diag-

nosing the disease by smear and culture. They founded the doctrine of the carrier state of diphtheria. The researches of Roux and Yersin are fundamental and upon them are based many of the present-day concepts of infection. Within a year or two after this epochal contribution, E. Behring (1890) reported upon the discovery of antitoxin. To this great German should go all honor for the introduction of protective sera into medicine. To him also goes the credit for suggesting the prophylactic use of diphtheria antitoxin to produce temporary passive immunity. Antitoxin was first prepared on a large scale in Germany in 1892 and within the next three years it was being made in large amounts in practically all civilized countries.

In the next ten or fifteen years extensive investigative work was carried on by laboratories throughout the world. Attention was directed not only to the immunology and serology of the disease, but also to the pathology. Extensive pathologic studies were published in this country and Europe chiefly by the pupils of Virchow.

Less than twenty years ago Bela Schick described the allergic reaction in an individual sensitive to diphtheria antitoxin. Two years later he demonstrated the fact that intradermal injections of diphtheria antitoxin did not produce a skin reaction if in the circulating blood of individuals there was sufficient antitoxin to neutralize the toxin. In 1907 Theobald Smith suggested the employment of toxin-antitoxin mixtures in order to produce active immunization against diphtheria. It was not until 1913 that von Behring applied in practice this method of preventing the disease, a method which has been extensively used throughout the United States, popularized largely by the efforts of Park (1913) and his collaborator, Zingher.

HOSPITAL STAFF TRANSACTIONS

HOSPITAL STAFF TRANSACTIONS. HOTEL DIEU.

The monthly meeting of Hotel Dieu Staff was held June 20, 1932, at 8 P. M.

The scientific program comprised:

I. A case report by Dr. Joseph Maldonado, "Rupture of the Heart; Autopsy." The patient, a male aged 74, inmate of the old people's ward, complained of weakness and a dull ache over the heart region, extending to the right mid-clavicular line. Examination showed the heart increased in size more to the left than the right but not downward, apex impulse not visible nor palpable, rate very slow, rhythm regular, tones distant and weak, no murmurs. Patient was ordered to bed and diagnosis of heart failure secondary to chronic thrombosis made; he seemed to feel better in the afternoon, but the following morning he expired in the bathroom, having gone there without aid or permission.

Autopsy showed about 300 c.c. blood (both fluid and clotted) under pressure in the pericardial cavity. There was a tear about $\frac{1}{2}$ cm. long in the visceral pericardium over the apex of the heart on the left side; through this tear a blood clot, about $5\frac{1}{2}$ cm. in length, had ruptured from the cavity of the ventricle right through the muscle, the rent in the muscle being higher than that through the pericardium. The heart was removed completely for further study.

Dr. Maurice J. Couret showed, on the screen, pictures of the actual heart—gross and microscopic; he explained the conditions responsible for the rupture.

Dr. S. C. Jamison: Rupture of the heart may occur from several different causes; the commonest is a result of general crushing injuries where there is also injury to other organs; then these other injuries take the center of the stage and the heart injury is overlooked.

Rupture, when it occurs, is usually in the auricles, for that is the thinnest portion. Spontaneous rupture merely from disease occurs as a result of coronary occlusion which causes necrosis of the wall and a rupture weeks or months afterward. In dealing with the common condition of coronary occlusion, we should remember to guard the prognosis, because of the possibility of sudden death months later. Rupture of the heart as a result of aneurysm is possible. Whenever a heart is as weakened as this one was by degenerative process, and there is a superimposed metabolic abscess (as I presume this must have been), such a heart is very likely to rupture.

When blood clots in the pericardium, the heart ceases merely as the result of pressure, so we can of course do nothing at all. We must differentiate, in traumatic injuries, between the cases

which occur with injury to the heart and those without efflux of blood from the pericardial cavity but in which the visceral pericardium is so injured that the blood can get into it but not outside. Unless we expect such a condition, ante-mortem diagnosis is impossible. Rupture of the heart cannot be recognized clinically. Besides rupture of the walls, either ventricles or auricles, it is not rare to see rupture of the valves, particularly the aortic. Rupture of the mitral valves is not unknown. I have seen only one rupture secondary to aneurysm.

II. Report covering six cases of "Primary Abscess of the Epiglottis" seen within fifteen years, by Dr. Val H. Fuchs:

Primary abscess of the epiglottis, while comparatively rare should be kept in mind when patients complain of a sticking sensation in the throat, accompanied by some dysphagia, hoarseness, and temperature. The six cases all showed purulent inflammation of the epiglottis itself on its anterior surface.

Etiologically, this condition results from exposure, from excessive use of alcohol or tobacco, or from trauma caused by foreign bodies—fish bones particularly, which may give rise to an abscess at the point of entrance into the glottic-epiglottic fold.

Treatment consists of cold applications and an astringent spray in the throat; but once the pus becomes localized, incision and drainage is imperative. One of the six cases had severe throat pains and dysphagia for twenty-four hours. A large, bulbous swelling on the anterior surface of the epiglottis was incised and drained, giving complete relief within three days. Another case had two distinct swellings, one on each side of the midline of the anterior surface, which ruptured en route to the hospital; suction to the mouth of swellings, and cold applications to neck were the only treatment necessary.

It is rare to see a primary infection of the cartilage, e.g. in the larynx. These abscesses take place in the loose areolar tissue; on one side the mucous membrane is closely attached and shows only a little edema; the loose area in front of the cartilage is infected, not the cartilage itself. If it were the cartilage, amputation of the epiglottis would almost surely be necessary.

One of the cases presented a small fish bone which was removed, and pus flowed freely from the swollen epiglottis. In another, using a Jackson laryngoscope, I elevated the tongue without elevating the epiglottis. The most important thing is to place the scope over the tongue, keeping the epiglottis out of the way so that the abscess can

be seen. Incision is made with a long curved knife.

Dr. Homer Dupuy: Dr. Fuchs' large experience is extraordinary. The cases I have seen were of highly infectious origin, with ulceration and abscess formation.

Cartilage, as a rule, does not readily give in to infection; but when it does, the surgeon is up against a tremendous proposition. In abscess of the epiglottis, one is very fortunate if he can avoid a tracheotomy. But increasing dyspnea calls for tracheotomy.

III. Dr. Joseph A. Danna spoke on "Some Principles Involved in the Pathology and Treatment of Cancer."

Dr. Maurice J. Couret exhibited slides and microscopic drawings of cancer cells. In one case, after surgical diathermy removal of a section of the tongue for a benign growth suspected to be carcinoma, a lymph gland removed from the neck a few minutes later showed lymph spaces filled with tissue detritus, without any inflammatory evidences whatever. In answer to Dr. E. H. Walet's question, "How can we know positively that the detritus in glands of the neck had not existed previous to the application of diathermy to the tongue?" Dr. Couret replied that in this case the lymph nodes showed no inflammation—only cell detritus in the lymph spaces.

Dr. H. E. Bernadas: Dr. Danna infers that normal epithelial cells, having once broken forth from their normal habitat, become the source of carcinoma. I do not think this true of normal epithelial cells in normal individuals. I believe it is true where there is a hereditary type of epithelial cells or active tissue. The heridity tendency is recessive, of course, but it is manifest.

Dr. P. B. Salatich: For carcinoma of the breast, I believe better results are obtained by beginning above, dissecting the fat and glands away from the axillary space and removing the breast as a whole. For carcinoma of the cervix, I have had better results with needles than with capsules.

Dr. F. Chalaron: Our results with pure radium for cancer of the prostate and of the bladder have been disastrous because of the inability to control radiation and the danger to nearby structures. On the other hand, when radon needles were placed around the growths, metastasis had not occurred after four years in one case, and five years in another.

STAFF MEETING OF THE MISSISSIPPI BAPTIST HOSPITAL

The regular monthly assembly of the staff members of the Mississippi Baptist Hospital was held at 6:30 o'clock on September 6 in the dining room of the hospital where dinner was served. At the termination of the dinner the visitors

were introduced. They were Drs. Welch and Bauw of the State Insane Hospital and Drs. Henry, Verner and Shannon of Jackson.

The superintendent then made a very interesting talk in which he asked the co-operation of all staff members in aiding the hospital in the collection of its fees by emphasizing to the patients before they are admitted that the hospital fee will have to be collected at dismissal, and letting them know about what they may expect to pay for the services rendered. Constant repairs are going on all of the time and at the present consist of the repair of the diet kitchen on the second floor. The hospital is trying to render the best service obtainable at all times and as reasonably as possible.

The minutes were read and adopted as read.

It was brought to the attention of the staff that it is time for the training school to open and for classes to be taught. Some of the men have been teaching for a long time and are stepping back urging that some of the younger men take on these duties now.

Dr. Robin Harris opened the program with a presentation of a case:

"On July 11, an 18-year-old boy presented himself to me for an examination. He gave a history of having had a chronic discharging left ear at intervals for 8 years or more. During the summer he had been swimming at regular intervals and two weeks prior to this examination his ear began to pain him more than usual during an acute attack.

"There was swelling and redness behind the ear and after cleaning the canal of a thick foul smelling discharge there was noted much swelling in the drum area and the surrounding canal. Roentgenogram showed a marked cellular formation. All cells in the left mastoid were filled with some breaking down apparently acute. At operation the mastoid was found filled with pus. At operation the cellular tissue was found soft, indicating considerable bone necrosis. The mastoid antrum was stuffed with a cholesteatoma. Of course, the treatment for cholesteatoma is radical mastoidectomy but in the face of acute infection, I elected to do a simple operation but stopped long enough to explain to the parents the gravity of the situation. They being very intelligent people readily agreed to radical mastoid operation at a later date. This lad had been in severe pain for 10 days. He had a rising in his head that so many people in country and town pay no attention to, accept it as a matter of course and do not have the condition treated. Now if this acute inflammation had not gone to mastoiditis, acute, the diagnosis of cholesteatoma would not have been made until possibly brain abscess or other intracranial compli-

cations. He obtained immediate relief from pain and felt as well as ever from the time he was out of ether. The point is most people and a great many doctors allow a chronic discharging ear to go on to sadness. I believe with constant watching 90 per cent of discharging ears are curable."

Dr. Lawrence Long then reported a review of the success that had been met with the use of atebirin by the United Fruit Company in which they reported the use of the same in some 320 cases; also, the fact that the annual report of this company is usually one of the outstanding pieces of medical literature of the year, especially with reference to tropical diseases.

Dr. Harvey Garrison, Jr., reported two interesting cases:

1. An infant that had lived fifteen hours and who had been very cyanotic since birth especially in the lower extremities.

There was a dullness in the back and bases of both lungs and though carbon dioxide and oxygen were given the child expired at the end of fifteen hours. A diagnosis had been made of prematurity since this baby was only an eight months' child, atelectasis and a possible injury to the lower extremities since they had remained so blue during the time the child lived.

At autopsy almost complete atelectasis was found and a patent ductus arteriosus but with a much larger duct than normally found even when they do persist.

This case was discussed by Dr. Wilson.

2. A three-day old infant was vomiting continuously since birth and seemed to persist in keeping a sort of mucus in its mouth. The vomiting was not projectile at all but everything that was taken seemed to roll out of the mouth about fifteen minutes after it was taken. Barium was given and what remained in the stomach did not pass the pylorus after 48 hours. A large soft mass was felt next to the liver on the right in the upper abdomen. Atropine was given to the point of saturation with no results. It was felt that since no relief had been obtained it was best to explore this child and see if there could not be relief given it. With local anaesthesia the abdomen was opened and there was found a somewhat thickened mucoid material in the peritoneal cavity. Also the transverse colon was bound to the duodenum by adhesions which were making a rather large mass which had been felt previously. This was freed easily by cutting these adhesions with scissors and the colon immediately dropped to normal position. The child improved very rapidly and normally.

This case was discussed by Dr. Hagaman and Dr. Garrison, Sr.

Some of the interesting cases that had expired during the previous month were discussed briefly.

Dr. Underwood gave an interesting account of the trip on the Know Mississippi Better train to Mexico City.

L. W. Long, M. D.

STAFF MEETING OF THE KING'S DAUGHTERS' HOSPITAL, GREENVILLE, MISSISSIPPI

Abstract—Eclampsia—Dr. J. B. Hirsch.

The convulsions of eclampsia are caused by an edema of the brain and should be treated along the same lines as any similar condition causing an edema of the brain with its nervous manifestations. Hypotonic fluid causes an increase in intracranial pressure whereas hypertonic solutions decrease it.

Renal elimination is the largest factor in the control of eclampsia. When the kidneys improve the eclamptic dangers increase. It is a grave mistake to minimize the kidney lesions. The cause of kidney lesions of eclampsias has never been agreed upon. The treatment, no matter what the stage, is practically the same: first, hospitalization; second, withhold fluids; third, diet should be more solid with low salt avoiding too much sweets. There should be moderate purgation with magnesium sulphate, intravenous glucose in concentrated form four or six hours apart, not overlooking magnesium sulphate in the vein, as well as amytal. As a last measure spinal puncture and venesection.

STAFF MEETING OF THE VICKSBURG SANITARIUM

The regular monthly meeting of the staff of the Vicksburg Sanitarium was held on Saturday, September 10, at 6:30 p. m. After transaction of business of the staff and consideration of the reports from the records department and analysis of the work of the hospital, the following special case reports were presented:

1. Acute Intestinal Obstruction, Postoperative.—Dr. A. Street.
2. Anemia.—Dr. L. J. Clark.
3. Anemia in an Infant.—Dr. G. C. Jarratt.
4. Ovarian Cyst with Twisted Pedicle in a Child.—Dr. R. A. Street, Jr.

Dr. L. S. Lippincott discussed the Clinical Application of Blood Chemical Analyses.

Three-minute reports of the literature of the month were made by Drs. J. A. K. Birchett, Jr., A. Street, Lippincott, and R. A. Street, Jr.

The meeting closed with a lunch. The next meeting of the staff will be held on Monday, October 10, at 6:30 p. m.

Leon S. Lippincott, Secretary.

VICKSBURG SANITARIUM—STAFF MEETING,
SATURDAY, SEPTEMBER 10, 1932

Abstract.—Acute Intestinal Obstruction, Post-operative.—Dr. A. Street.

Patient.—A white female, single, aged 33 years, first observed on August 10, 1932. Chief Complaint—Severe pain in right lower abdominal quadrant, duration 48 hours; no vomiting; bowels well open. The last menstrual flow was one week ago. Has always had dysmenorrhoea. There had been occasional attacks of low abdominal pain and soreness, frequently unrelated in time to the menstrual flow. General health during the last twelve months had been rather poor. Appetite poor and had lost fifteen pounds in weight in the last year. Had been nervous. Had been treated for sinus trouble. History suggested a tendency to hysteria. Patient had a sister who had a marked psychoneurosis and hysteria and who was operated upon twice for acute post-operative intestinal obstruction. Physical Examination—Well developed, poorly nourished, temperature 98.6°F, pulse 76. Blood pressure 140/100. Important findings were as follows: The duodenum was flat; no rigidity; moderate low abdominal tenderness, more marked on the right. Rectal examination showed fundus well forward, normal size and contour and movable. There was a firm mass behind the uterus about three inches in diameter which was movable and very tender. The impression obtained from the history and physical examination was that the pelvis contained a growth, probably a cyst of an ovary, and probably with a twisted pedicle. Blood—Leukocytes, 6,200; small lymphocytes, 42; large lymphocytes, 5; polymorph neutrophils, 50; polymorph eosinophiles 3. Urine—Not abnormal.

Under daily observation the pain and tenderness became worse.

Operation—On August 12; low median incision. The right ovary was a firm mass, 2½ inches in diameter and irregularly rounded. It was intimately adherent to the base of the right broad ligament, from which it was separated with difficulty, and then removed, along with the right tube. The raw surface was carefully peritonealized. The left ovary was about two-thirds as large as the right and also cystic, irregular in shape and of increased density, and was abnormally fixed to the broad ligament. This picture was suggestive of ovarian endometriosis and removal of the left ovary was considered. In view of the age of the patient (33 years) the ovary was not removed. The appendix showed evidence of chronic inflammation and was removed. Tissue examination by Dr. Lippincott showed endometriosis of the right broad ligament and surface of the right ovary; oophoritis, acute and chronic; salpingitis, chronic, right; cystoma of right ovary;

appendicitis, chronic. The patient began to menstruate about the fifth day after operation. On August 21, nine days after operation, the patient suffered pain, nausea and vomiting. On August 22, there was hiccough, moderate abdominal distension, increasingly rapid pulse and weakness. Roentgenogram of the abdomen in the erect posture showed multiple fluid levels in the intestines. The patient received 1,000 cc. of 5 per cent glucose in 1 per cent saline solution intravenously on the 22nd, and 2,000 c.c. of the same solution on the 23rd.

On August 23, the abdomen was reopened through the original incision which was well healed and clean. The ileum was completely obstructed by a peritoneal band drawn tightly across it and fixing it to the broad ligament stump close to the right infundibulo-pelvic ligament. It was densely adherent in this position.

The intestine showed no gangrene and after liberating it, the wound was closed without drainage. Convalescence was uneventful, after a few days of maintaining body fluids and nourishment by saline and glucose intravenously, 3,000 c.c. of 5 per cent glucose in 1 per cent salt solution each 24 hours.

Remarks.—In reviewing this case, the possibility comes to mind that the endometriosis of the right broad ligament with the advent of the menstrual period on the fifth post-operative day may have been a factor in causing the obstruction. It seems possible that this may have been brought about by endometriotie tissue in the stump taking part in the menstrual process and causing the inflammatory reaction and adhesive process with resulting obstruction. Since we now have a positive diagnosis of endometriosis, it would seem that the removal of the left ovary as well as the right would have been desirable.

VICKSBURG SANITARIUM, STAFF MEETING,
SATURDAY, SEPTEMBER 10, 1932

Abstract.—Anemia in an Infant.—Dr. G. C. Jarratt.

Patient—White male, aged seven months, admitted to hospital July 31, 1932. Chief Complaint—Fever, paleness. Present Illness—Mother stated that infant began to run high fever previous morning and had continued since. Fever was 102° F. this morning. Infant had been very fretful, restless, and refused bottle for past two or three days. No cold or cough since onset of fever. Stools had been hard and yellow; scant urine output for previous two days. Past History—Mother stated that when infant was three days old began to bleed from nose, gums, and buccal membrane; also passed large black clot of blood from bowels. Urine was not red indicating hemorrhage from the genito-urinary tract. There were no petechiae over body; no fever or jaundice with

bleeding. Private physician in attendance gave intramuscular injection of serum to promote clotting of blood; continued to ooze from nose and gums with passage of clots from bowels and serum was repeated on the next day. In 24 hours all bleeding stopped and has never recurred. There never has been any associated jaundice or enlarged glands. Since birth mother has noted a progressive paleness. Birth History.—Seven months premature, weighing four pounds; cephalic delivery without forceps; no cyanosis or convulsions. Did not nurse for first few days due to extreme weakness. Feeding History.—Taken off of breast on third day of life due to insufficient milk. Put on Dime brand (condensed) milk, two teaspoonfuls to three ounces of water and this has been given on no regular schedule during the day and night to present time. No orange juice, cod liver oil, cereals or vegetables.

Family History.—One sister aged 19 months had infantile eczema; no jaundice in any member of the family. No tuberculosis contact. Physical Examination.—Well developed and nourished but very pale and anemic infant acutely ill. The general appearance of the skin was a greenish paleness. Weight 15 pounds. No bossae; conjunctivae very pale; four upper and two lower incisors through; buccal membrane very pale. Slight beading of ribs. Loud systolic murmur over whole of precordium with maximum intent at base, not transmitted; no enlargement. Believed murmur hemic in nature. No enlargement of spleen or lymph glands. Urine.—Large trace of albumin; trace of acetone. Blood.—Fragility normal. Wassermann test negative. Retraction of clot, 45 minutes. Hemoglobin, 40. Erythrocytes 2,130,000, with anisocytosis, poikilocytosis, polychromatophilia and numerous degenerated red cells. Platelets 144,000. Leukocytes 7,200; small lymphocytes, 59, large lymphocytes 6, monocytes 2, polymorph neutrophils 33. No malaria found. Infant was admitted to hospital. Much difficulty in finding suitable blood donor. Given 125 cc. of whole citrated blood intravenously with no reaction, on August 1. Child discharged on formula: Cow's milk, 20 ounces; water, 10 ounces; Karo, two tablespoonfuls; 6 ounces to be given at 6, 10, 2, 6 and 10 o'clock. Also given jeculin, two teaspoonfuls three times a day with iron and ammonium citrate. August 3.—Weight 15 lbs.; temperature 98.6° F. Mother stated infant taking formula and seemed to enjoy it. Vomits jeculin when given. No fever since returning home and slept well. Had one to two yellow stools daily. Color greatly improved and smiling and seemed happy. Murmur had disappeared.

Diet.—6 a. m., 6 oz. formula; 8 a. m., orange juice, 1 ounce; 10 a. m., cereal and 6 oz. formula; 2 p. m., vegetable puree with yolk of egg, but-

ter, and on alternate days strained vegetable soup, 6 oz. formula. 6 p. m., prune or apricot puree and 6 oz. formula; 10 p. m., 6 oz. formula. Prescribed iron and ammonium citrate and sun baths, front and back, up to 15 minutes twice daily. August 7.—Weight 15¼ lbs. Taking formula, fruit, cereal, vegetables and soup well. Excellent color, smiling, spleen and liver not palpated, no glands enlarged. Continued diet and iron. Prescribed cod liver oil one teaspoonful twice daily. September 5.—Weight 18¼ lbs. Mother stated infant takes all of food and seems like a different child. Giving sun baths and cod liver oil but had stopped iron on August 10. Color improved. Beginning tan of body. Blood.—Hemoglobin 45; erythrocytes 3,250,000; platelets 152,000; leukocytes 9,600; small lymphocytes 53; large lymphocytes 6; monocytes 20; polymorph neutrophils; 17 polymorph eosinophiles 4. Other vegetables added to 2 p. m. feeding, also dessert as jello, custard and baked apple. Formula: Cow's milk 23 ounces; water 7 oz.; Karo two tablespoonfuls; 6 oz. at 6, 10, 2, 6 and 10 o'clock. Continued iron. Summary.—The cause of anemia in this case is attributed to several factors. The first of these is prematurity. We know that premature infants under ideal feeding conditions are prone to anemia and especially if prophylaxis is not instituted early as was not done in this case. Secondly, from the history the infant evidently suffered from me-laena neonatorum, losing considerable blood for the first few days of life. Lastly, improper feeding as evident from the feeding history and also the fact of prompt and rapid recovery from small transfusion and proper diet.

Abstract.—Ovarian Cyst with Twisted Pedicle in a Child.—Dr. R. A. Street, Jr.

Patient.—Colored female, aged 10 years, admitted to hospital August 17, 1932. Chief Complaint.—Continuous lower abdominal pain for past two days associated with nausea and vomiting. Present Illness.—Onset with rather acute, sharp, well localized pain in the left lower quadrant two days ago, followed by a swelling in the lower abdomen much nausea and continuous vomiting which was never flocculent or bile colored. Pain continued all day and was not relieved by medication; slight relief obtained by lying on left side. After a restless, sleepless night patient was referred to hospital. No bowel movements for past two days only small amount of flatus obtained by enema. Past History.—Negative except that for the past year there has been occasional sharp, localized pain in the left lower quadrant, of short duration, never as severe as in present illness, and relieved by rubbing and lying down. Physical Examination.—Acutely ill; temperature 100.4° F.; pulse 90; respiration 18; blood pressure 110/72. Tongue slightly coated; lips dry and crusted. Vis-

ible swelling in lower abdomen with upper level about at the umbilicus; acutely tender; a cystic-like mass, dull note to percussion feels round, difficult to outline because of acute tenderness; not freely movable. Blood.—Leukocytes 14,800; lymphocytes 22, monocytes 2, polymorph neutrophils 76. Urine.—Not remarkable. Wassermann, Kahn, and Kline and Young tests negative.

Impression at this time—condition probably intestinal obstruction in lower bowel. The mass was difficult of explanation. Operation was advised. Intravenous glucose solution was given. Operation.—Under anaesthesia, the mass was found to be freely movable and cystic and the diagnosis of possible ovarian tumor was then considered. This was the finding on opening the abdomen. The cystic mass was gangrenous and the pedicle twisted. Mass including ovary, tube and involved part of uterus removed. Wound closed without drainage. Subsequent.—Excellent postoperative course and rapid recovery. Patient last seen on September 3; at this time the wound was healed and the condition excellent. Pathological Report by Dr. Lippincott.—Appendicitis, chronic; dermoid cyst of ovary, left; oophoritis, acute with interstitial hemorrhage, left; salpingitis, acute and chronic, left; Interstitial hemorrhage and acute inflammatory of broad ligament and horn of uterus. Comment.—The case was interesting in view of the pathological findings in so young a patient.

STAFF MEETING OF THE VICKSBURG HOSPITAL AND CLINIC

The regular meeting of the staff of the Vicksburg Hospital and Clinic was held on August 11, 1932, at the Vicksburg Hospital. A discussion of the cases of mortality occurring during the preceding month was held with free comment by the staff.

Dr. W. E. Akin was given leave of absence for one year.

Dr. Thomas P. Sparks, Jr., formerly of Jackson, was elected to membership on the staff.

Scientific program was presented as follows:

1. General Remarks Concerning Tumors of the Breast, with Report of Cases.—W. H. Parsons, M. D.

2. The Diagnosis of Diseases of the Blood.—W. G. Weston, M. D.

3. Routine business transacted.

4. Lunch was served and the meeting was adjourned.

Abstract.—Some General Remarks Concerning Tumors of the Breast, with Report of Cases.—Dr. W. H. Parsons.

A series of 5,000 patients was reviewed, and it was found that of this number, fifteen had presented themselves because of some disorder of the breast. Of these, fourteen were females, one was

a male. Of the fifteen patients, six were found to have malignancy of the breast, one tuberculosis of that organ, one an acute inflammatory condition and the remainder had benign tumors.

The essayist reported also on the frequency with which carcinoma of the uterus and certain other organs had occurred in the series of patients studied, and it was found that during the period of time covered by this review carcinoma of the breast was decidedly less often encountered than malignancy of the uterus or stomach.

The statement from Balfour's clinic that malignancy of the stomach in young people should not be regarded as more serious than in the older was recalled and the attention of the staff was drawn to the fact that in the limited series of cases of carcinoma of the breast under discussion, likewise, relative youth did not seem to unfavorably affect the prognosis.

The questions of diagnosis and treatment were discussed in some detail. The results following radical excision alone and radical excision with radiation or deep x-ray therapy were contrasted as well as technical details such as cautery excision, etc. It was remarked that about one-third of cases of carcinoma of the breast are arrested and possibly cured.

Six cases were reported in detail, outlining especially the age of the patient, the breast affected, the date on which patient was first examined, the date of onset of symptoms, previous treatment, whether there was or was not axillary involvement, the type of operation done, the histologic reports of the growth removed and the end results. It was remarked by the essayist that in these particular cases, sufficient time had not yet elapsed to draw any conclusions relative to the ultimate results.

Abstract.—The Diagnosis of Diseases of the Blood.—Dr. W. G. Weston.

The essayist outlined the more common points in the diagnosis of blood dyscrasias. The discussion was limited to those conditions in which the most marked changes occurred in the blood itself, and scant mention of the alternations found in other tissues was made.

It was remarked that the following findings should immediately suggest the possibility of a blood disease and that exclusion of same ought to be done by appropriate laboratory procedures:

1. The presence of an anemia, the suspicion of which should always be confirmed or ruled out by laboratory procedures.

2. Enlargement of the lymph nodes or the spleen or both. The presence of either indicates complete laboratory study and, if necessary, biopsy.

3. Hemorrhage into the tissues from the mucous membranes.

4. Throat lesions, particularly of the ulcerative or membranous type.

Further elaboration of the findings leading one to suspect a blood disease was made and a brief discussion of the above findings was given.

Some of the causes of anemia were listed and discussed as follows:

1. Primary or pernicious anemia; 2. Secondary anemia; 3. The so-called pernicious anemia of pregnancy; 4. Aplastic anemia, primary or secondary; 5. Anemia associated with other blood diseases, for example leukemias.

The essayist reported a case observed by him elsewhere in which, with a history of repeated and prolonged menorrhagia and metrorrhagia to the point of exsanguination, and, in spite of the vehement denial on the part of the patient of the possibility of pregnancy and incomplete abortion, was treated as an incomplete abortion in a conservative manner for several weeks before the true diagnosis was made. Complete blood study earlier would have made the diagnosis much sooner, and although the final outcome might not have

been different, certainly a more correct prognosis could have been made to the family.

The appearance of the throat in agranulocytosis was outlined and case report was given.

A word of caution was offered relative to the removal of enlarged, red and apparently chronically diseased tonsils without complete physical examination and blood study. Particularly should tonsillectomy be done with caution in this type of case, where there is also a cervical adenopathy.

The essayist had observed one case in which the above conditions were present, and in which tonsillectomy was done without undue difficulty. One week later the patient returned with all of the cardinal signs and symptoms of an acute lymphatic leukemia and death occurred within twenty-four hours.

The importance of eliciting an accurate history was again stressed and mention was made of its particular value relative to the occupation of the patient and relative to recent illness or medication.

LOUISIANA STATE MEDICAL SOCIETY NEWS

TUBERCULOSIS.

The Tuberculosis and Public Health Association of Louisiana is giving a series of one-day conferences during October at the following places:

New Orleans	October 8, 1932
Baton Rouge	October 11, 1932
Lafayette	October 13, 1932
Lake Charles	October 15, 1932
Alexandria	October 18, 1932
Monroe	October 20, 1932
Shreveport	October 22, 1932

Mr. Arthur J. Strawson, Field Secretary of the National Tuberculosis Association, will attend all of these conferences and take a leading part in them.

A cordial invitation to be present at these meetings is extended to all interested.

Louisiana State Board of Health.

MEETING AT MARINE HOSPITAL.

A joint meeting of the New Orleans Gastro-Enterological Society and the Medical Staff of the Marine Hospital will be held on October 20 at 8 p. m. in the main building of the Marine Hospital. All members of the Profession are cordially invited.

The following program will be presented:

1. Transposition of the Colon. Report of three cases.

By: Dr. A. L. Levin.

2. Unusual cases of Bacillary Dysentery.

By: Dr. D. N. Silverman.

3. Presentation of Cases.

By: Dr. M. K. King and Dr. A. Mayoral.

Donovan C. Browne, M. D.,
Secretary.

SECOND DISTRICT MEDICAL SOCIETY.

The Second District Medical Society held its monthly meeting at Reserve, September 15, at the home of Dr. James S. Parker.

After a very enjoyable dinner the Society heard an instructive paper on, "Infections of the Hand," by Dr. Emmett L. Irwin of New Orleans. Much interest in this subject was manifested by the number of discussions. The attendance was very good, every Parish comprising this Society was represented by some members.

Dr. Daniel N. Silverman, Councilor of the Second Congressional District, was notified that the next meeting of the Organization will be held on Thursday, October 20, at Kenner, the home of the President, Dr. Jos. S. Kopfler.

HUTCHINSON MEMORIAL CLINIC.

The Hutchinson Memorial Clinic was opened September 19, 1932, in the Hutchinson Memorial Building, Tulane University, 1430 Tulane Avenue. The clinics are not at the present time all being run. Five different departments are represented: Medicine, Surgery, Tropical Medicine, Neurology and Psychiatry, and Preventive Medicine. The clinics are open to all those unable to pay. It is hoped that advantage will be taken of this clinic by doctors who need assistance or who would like more extensive studies than can be made on their indigent patients and that they will refer them for consultation. Reports will be made to the doctors if notes are sent in requesting information, either general or specific.

NEWS ITEMS.

Dr. H. W. E. Walther, head of the department of urology at the Southern Baptist Hospital, New Orleans, has just been honored with the Vice-Presidency of the Section on Urology, of the Fourth Congress of the Pan-American Medical Assn., which will be held in Dallas, Texas, March 21-25, 1933. The Congress includes physicians of South America, Central America and the United States.

Dr. F. E. LeJeune, Dr. N. F. Thiberge, Dr. R. A. Strong, Dr. G. C. Anderson and Dr. J. H. Musser will speak before the Eighth Councillors District Medical Society, in McComb, October 11, 1932.

Dr. Charles A. Bahn, Professor of Ophthalmology in the Medical Department of Louisiana State University, will speak at the tenth annual fall clinical conference of the Kansas City Southwestern Clinical Society the first week of October. Dr. Bahn will hold a clinic on External Diseases of the Eye. He will give a clinical lecture on Eyes and Teeth. Dr. J. H. Musser, at the same meeting, will hold two clinics and will give a clinical lecture on Disorders Due to Nutritional Errors and will give an address on Subacute Bacterial Endocarditis.

INFECTIOUS DISEASES IN LOUISIANA.

Dr. J. A. O'Hara, president of the Louisiana State Board of Health, in collaboration with the Treasury Department of the United States Public Health Service, has issued mortality weekly reports which briefly abstracted contain the following information. For the week ending August 20, the thirty-third week in the year, the following cases were reported: Syphilis 106, gonorrhea 67, pneumonia 48, tuberculosis 48, malaria 47, cancer 37, typhoid fever 35 and diphtheria 18.

The typhoid fever cases were scattered over the State. Eight cases were from Orleans Parish, six of which were imported. There were six cases in Natchitoches Parish and 3 cases in Avoyelles.

For the thirty-fourth week ending August 27, the number of cases reported of syphilis was 39. A marked increase in pneumonia in the last three weeks as shown by the fact that 33 cases were reported whereas the 5-year average for the thirty-fourth week is 15. There were also reported 35 cases of typhoid fever, 31 cases of cancer, 27 of malaria, 32 of tuberculosis and 12 of gonorrhea. These parishes show the largest number of cases of typhoid fever: Orleans 15, Avoyelles 4, Caddo 3, Lafayette 3, Natchitoches 2, Bienville 2, DeSoto 2.

For the week ending September 3, 54 cases of syphilis were reported and 42 cases of gonorrhea. Typhoid fever was reported in 39 instances, malaria 34 cases, 28 of tuberculosis and diphtheria 20, pneumonia only 14 cases being reported. Other unusual diseases that were reported were, 1 case of typhus fever, 2 cases of poliomyelitis, and 3 cases of cerebrospinal meningitis.

For the week ending September 10, there was a marked increase in the cases of malaria, 62 cases being reported. Pneumonia had jumped considerably, 29 cases being recorded. The other diseases that were reported in double numbers included 35 cases of hookworm, syphilis 29, cancer 23, tuberculosis 28, typhoid fever 21 and diphtheria 22. Three cases of undulant fever were reported, two from Orleans Parish and one from Jackson. One of these from Orleans Parish was reported as imported.

HEALTH IN NEW ORLEANS.

The Department of Commerce, Division of Vital Statistics, has issued the following weekly reports concerning the health of New Orleans. For the week ending August 13, the death rate in New Orleans was 15.5, as the result of the deaths of 141 individuals, eighty-six of whom were white and 55 colored. There were 13 under the one year age, giving an infant mortality rate of 74.

For the week ending August 20, the death rate amounted to about the same 15.3. For this week there were 139 deaths, 82 of whom were white and 57 colored. There were 12 deaths under the one year age, giving an infant mortality rate of 68. For the week which ended August 27 there was somewhat of a decrease in the death rate. For this week 69 white and 57 colored individuals died making a total of 126, giving a death rate of 13.9. The infant mortality rate had decreased to 51 as a result of the deaths of only 9 babies. For the week ending September 3, the death rate was 14.0. The 127 deaths were di-

vided, 77 white and 50 colored. Twelve babies under one year of age died giving an infant mortality rate of 68.

For the first 35 weeks in the year the death rate in the City was 15.8 as contrasted with the rate of 17.1 in 1931.

THE SOUTHEASTERN SURGICAL CONGRESS FOURTH ANNUAL ASSEMBLY.

The attention of the medical profession is called to the announcement of the Fourth Annual Assembly of The Southeastern Surgical Congress which will be held in Atlanta, Georgia, March 6, 7 and 8, 1933.

The same high class program which characterized the second and third assemblies will be provided, also clinics will be conducted by some of the speakers.

B. T. Beasley, M. D., Executive Secretary.

THE AMERICAN COLLEGE OF SURGEONS' CLINICAL CONGRESS.

The twenty-second annual Clinical Congress of the American College of Surgeons will be held in St. Louis, October 17-21, with headquarters at the Jefferson Hotel. An instructive program of operative clinics has been prepared by the local Committee on Arrangements of which Dr. Evarts A. Graham is Chairman.

Hospital standardization conferences under the direction of Dr. Malcolm T. MacEachern will be held during the first four days. Four special programs have been prepared dealing respectively with fractures, curability of cancer, industrial medicine and traumatic surgery, and the teaching of surgery and the surgical specialties. Medical motion pictures will be on daily exhibition. On Monday evening the John B. Murphy oration in surgery entitled, "Pillars of Surgery," will be delivered by Sir William I. DeCourcy Wheeler, M. S., F. R. C. S. I., Dublin, Ireland. On Friday evening the convocation will be held for the incoming Fellows, and the Fellowship address on "Some New Things in Physics" will be delivered by Robert Andrews Millikan, Ph.D., LL.D., Sc.D., Nobel Laureate. Dr. J. Bentley Squier will deliver the presidential address entitled, "The American College of Surgeons—Twenty Years of Ambitious Effort."

Among the features of the evening meetings will be the oration on fractures by Dr. Philip D. Wilson and the oration on industrial medicine and traumatic surgery by Dr. Frederic A. Besley. A special program on ophthalmology and oto-

rhinolaryngology will be held at the Statler Hotel and there will be clinics on these subjects during the entire week in the St. Louis hospitals.

AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY.

The next written examination of the American Board of Obstetrics and Gynecology will be held on Saturday, October 22, at 2 p. m., in 19 different cities of the United States and Canada. In order to reduce traveling expenses for candidates special arrangement may be made through the Secretary for taking the written examination at any city other than those regularly specified where there is a Diplomate who can be empowered to conduct the examination. This arrangement does not apply to the general, clinical examination.

The next general, oral and clinical examination, is to be held in conjunction with the meeting of the Pacific Coast Society of Obstetrics and Gynecology at Los Angeles, California, on December 7, provided there are sufficient applicants.

Applications for these examinations should be filed immediately. Lists close for Group B applicants (see booklet) on October 5, and for Group A applicants on November 15.

For application blanks and other information, address Dr. Paul Titus, Secretary, 1015 Highland Building, Pittsburg, Pennsylvania.

RESOLUTIONS ON THE DEATH OF DR. BOYKIN.

Whereas, it has pleased Almighty God in His infinite wisdom to remove from our midst Dr. P. A. Boykin; and

Whereas, Dr. Boykin was an active member as well as Vice-President of our Society; be it therefore

Resolved, That we the members of the Third District Medical Society, hereby express our deep feeling of appreciation of his worth as a member of our Society and our sincere sorrow at his untimely death.

Resolved, That we extend our sincerest sympathy to his family. Be it further

Resolved, That these resolutions be spread upon our minutes and copies be sent to the New Orleans Medical and Surgical Journal for publication.

L. B. Long, M. D.

A. C. Kappel, M. D.

MISSISSIPPI STATE MEDICAL ASSOCIATION NEWS

L. S. Lippincott, Editor

Jacob S. Ullman, Associate Editor

D. W. Jones, Associate Editor

THAT WE MAY KNOW EACH OTHER BETTER.

William Henry Frizell, M. D., was born July 23, 1872 at Poplar Creek, the son of Dr. W. H. Frizell, Sr. He attended the Poplar Creek Academy and received his degree in medicine from the University of Nashville, March 24, 1897. He was located in his native village from 1896 to 1901 when he removed to his present location at Brookhaven. He attended the New York Poly-clinic Post Graduate course and received his certificate together with a certificate in operative surgery in 1901.

Dr. Frizell served as county health officer of Lincoln County for twenty years under varying administrations until he was made a member of the Mississippi State Board of Health in 1930 for a term of six years.

He has been a member of the Mississippi State Medical Association since 1901, was made a member of the Council from the Eighth District in 1917 and served as a member of the executive committee of the Council until May, 1928, when he was elected president of the Association, for the year 1928-1929. He served the Association on its important committee on constitution and by-laws for the years 1930-1931 and 1931-1932, during which time numerous changes for the betterment of the Association were proposed and adopted. He was again elected to the Council from the Eighth District in April, 1932, and is now serving as secretary of that body.

Dr. Frizell served as organizing secretary of the Tri-County Medical Society in 1908, as its secretary for sixteen years, and as its president for one term.



W. H. FRIZELL, M. D.

Brookhaven, Miss.

Councilor, Eighth District, Mississippi State Medical Association.

He was a member of the draft board for Lincoln County for the period of the World War. He has been a member of the staff of the King's Daughters' Hospital of Brookhaven since its foundation and was chosen president of the staff for four terms.

Dr. Frizell was married to Miss Oline Holmes in October, 1899, at Texarkana, Ark. One year later she died leaving an infant daughter. He was married to Miss Bessie Crosby in December, 1902, at Hattiesburg. To this union were born three daughters and two sons.

He has served his community in various capacities, his school as trustee for one term, and his lodges in official capacities. He was chosen for the 1932 edition of "Who's Who in Government," by the Biographic Research Committee.

MEDICAL WRITING (Continued.)

From "The Art and Practice of Medical Writing," Simmons and Fishbein.—By permission.

"FANCIES VERSUS FACTS. — Conspicuous among returned manuscripts are the products of the theorist who, without scientific knowledge, claim that they have solved problems that are puzzling research workers and scientists. The number of physicians who have the courage to

discuss scientific problems concerning the fundamental and elementary principles of which they are entirely ignorant is larger than many imagine. Such papers usually are returned with the suggestion, circumspectly phrased, that an ounce of fact is worth a ton of theory.

"That every physician has a right to express his opinions, to advance theories and to make known his discoveries is an accepted principle, and he should not be denied this right by an editor without a good reason. But the reader also has his rights, and the editor should regard these as paramount. The reader has the right to demand that the editor shall not publish fiction for fact or fallacies which he—the reader—is not qualified to detect. The editor is supposed to have knowledge of the author and of his dependability that the reader cannot have. The reader certainly may expect that the editor will comb out such material as is obviously false.

"A well known physician sent to the editors for publication a paper in which he claimed that he had discovered a bacterial causative agent for a not uncommon, apparently noninfectious disease. If based on fact, the discovery was epoch making. The average reader, especially if he had not been trained in bacteriology, might easily have been deceived into accepting the author's statements as dependable evidence. To the bacteriologist, the organism was reminiscent of a common contaminator in careless work. But the author was a man of well earned national repute, and a frequent contributor to medical literature. Recognizing that the judgment of great men may be warped by over-enthusiasm, the editor, nevertheless, was influenced by the author's reputation; he felt that the responsibility in this instance should rest on the author, and the paper was accepted. In this case, the paramount rights of the reader were overlooked.

"On another occasion, a manuscript was submitted in which the author advanced the theory that both the cause and cure of cancer were matters of diet. The evidence submitted, however, was not convincing and the paper was returned, in spite of the fact that this author was nationally well known. Shortly afterward it appeared in an eastern journal. Its publication has done harm.

"Not long since, an article entitled 'The Etiology and Elimination of Tuberculosis' appeared in a medical weekly. It was full of fallacies and misstatements. For instance: 'The vaccine as employed against smallpox contains syphilis and is the primary cause of the white plague'; and 'syphilis is the primary lesion that allows the development of tuberculosis.' Further on the readers were told, as by one of authority, that syphilis is the cause of cancer. Undoubtedly, the readers of the journal in question sent some em-

phatic protests; but, instead of apologizing, the editor justified his action in publishing the article by saying: 'As it was written by a physician practicing medicine, we decided that it should come to light, in spite of its weird conclusions. We believed that it should be presented before the medical profession and cause a healthy discussion.' The editor was not true to his readers. Far more harm is done in the publication of such fallacious matter than in procrastinating with, or in rejecting, a dozen papers offering new theories and new evidence which may be of value but which are not convincing."

(To be continued).

WHAT OTHERS SAY. ARE WE HONEST?

"Here is another letter written in 1927 by a hospital superintendent of a 150-bed institution: 'I am weighing the situation. What do other men and women do in such positions? We say openly to the public in our campaign to raise funds, "Approved by the American College of Surgeons." Now our record librarian, our student nurses, and our graduate nurses know of many practices in the hospital which would not be approved. Non-emergency operations are constantly being done without securing full clinical data to confirm diagnosis, general staff conferences are few and far between, supplementary infection in cases handled by one of our surgeons is so constant as to be remarked upon by staff members and nurses, etc. One recent incident in the obstetric department which cannot be put upon paper is evidence of every wrong thing in hospital practice. Our young student nurses are keen these days. Some of the questions they ask in our courses in ethics I cannot answer frankly. Yet they get their examples in conduct from those around them. Loyalties—how shall they be interpreted? If the chief of my surgical service will not discipline and will not let the College of Surgeons discipline, how can I, a nurse, though I possess the knowledge of the College infringements, remedy the situation?'—Meta Peacock—Transactions of the American Hospital Association, 33:518, 1931.

PUBLICITY FOR SMALL HOSPITALS.

"A dozen years ago banks considered it unethical to use publicity. One day some banker said to himself, 'I have as much right as someone else to say what is ethical for my bank. I am going to publicize my bank.' Today it is ethical for banks to use publicity. A few years ago it was, by common consent I suppose, considered unethical for a hospital to say anything about itself, but today our hospitals have waked up to the fact that instead of hiding our lights under a bushel we have a duty to the public to let them

know what we are doing within our walls.

"A hospital is a business proposition—in fact a business, plus. Why then should it not follow good business principles and inform the public?"—Robert Jolly—Transactions of the American Hospital Association, 33:526-527, 1931.

EXPLANATION.

"Vicksburg, Mississippi.

"Sept. 5, 1932.

"Dear Mr. Editor:

"One of the most interesting features of modern medicine is that, every now and then, something that has been a mystery for ages is explained and made perfectly clear by some new diagnostic method.

"Those of us who have seen, and heard, Dr. Dan Williams of Gulfport on the floor of the House of Delegates—where he has been a familiar figure ever since there has been such a body—have frequently wondered at his lack of vision and his inability to see clearly even the simplest proposition.

"All this is now explained by that 'instrument of precision,' the camera. You will note from his photo in the last Journal that he has double pupils in both eyes. This causes a blurring and distortion of his vision, so that what we have always thought was a mental quirk turns out to be only a physical defect.

"Sincerely yours,

E. F. Howard."

ISSAQUENA-SHARKEY WARREN COUNTIES MEDICAL SOCIETY.

The regular monthly meeting of the Issaquena-Sharkey-Warren Counties Medical Society was held on Tuesday, September 13, at 7 p. m., at the Y. M. C. A., Vicksburg, with 19 members and three guests present. The scientific program included the following:

1. Acute indigestion.—Dr. G. W. Gaines.

Discussed by Drs. G. M. Street, W. G. Weston, E. F. Howard, F. M. Smith, and P. S. Herring. Dr. Gaines closed.

2. Osteomyelitis.—Dr. D. A. Pettit (In the absence of Dr. Pettit read by Dr. F. M. Smith).

Discussed by Drs. A. Street, Parsons, J. A. K. Birchett, Jr., and W. H. Scudder. Dr. Smith closed.

3. Some Interesting Urologic Problems.—Dr. T. P. Sparks, Jr.

Discussed by Drs. J. A. K. Birchett, Jr., P. S. Herring, A. T. Palmer, and A. Street. Dr. Sparks closed.

Dr. W. H. Parsons was chairman of the program committee for this meeting.

The meeting closed with a Dutch Lunch.

The next meeting of the Society will be held at the Y. M. C. A., Vicksburg, Tuesday, October 11 at 7 p. m. The committee in charge of the

program consists of Dr. G. C. Jarratt, Chairman; Dr. E. F. Howard, Dr. L. S. Lippincott, Dr. P. S. Herring, Dr. B. B. Martin, Dr. A. K. Barrier, Dr. E. B. Stribling, Dr. J. B. Benton, Dr. W. H. Scudder, and Dr. M. J. Few.

MUTUAL AID SOCIETIES.

Since not all of our members take the Journal of the American Medical Association, this might prove of interest.

E. F. Howard.

"Newspapers recently announced that the physicians of Cuba employed by the mutual aid societies had revolted against the terms of their employment and that at the request of the president of Cuba they had agreed to postpone their strike for seventy-two hours. The president is studying the dispute, which is precipitated by a refusal of the societies to drop from their membership lists all persons financially able to pay regular fees for medical attendance.

"The situation thus precipitated in Cuba was called to the attention of the House of Delegates of the American Association in 1927 by Dr. J. M. Penichet, professor of ophthalmology in the University of Havana. The conditions of medical practice in Cuba are unusual. The population is slightly over 3,000,000 and there are about 3,000 physicians practicing in the island. This would seem to indicate approximately 1,000 available patients for each physician, whereas actually such is not the case. Some two-thirds of the population are affiliated with the Spanish mutual aid societies. About fifty years ago the Spaniards established this form of practice primarily to take care of laborers. For the sum of \$2.00 a month, members of the society are entitled to medical care in case of illness. In addition, the societies have developed clubhouses, schools, libraries, gymnasiums, ballrooms and similar amusements, and in some instances they own banks. Physicians are employed on small salaries to provide medical care. There are approximately twenty of these health societies. One of them has at least 60,000 members and another some 20,000 members. In addition to hospitals they have exceedingly ornate and handsome clubhouses, which constitute a rallying place for their membership. Shortly the plantation owners and other wealthy patrons of these organizations decided to avail themselves of the same privileges as were accorded to the laborers. As a result the private practice of medicine began to fall into desuetude and therewith the medical profession itself began to retrograde. In his address to the American Medical Association in 1927, Professor Penichet pointed out that the mutual aid societies were able to function largely through exploitation of the medical profession. The physicians formed a federation to oppose these powerful trusts and to free the med-

ical profession. Previously to 1927 the profession had revolted twice, and there has been constant conflict since that time.

"In a trip recently made to Cuba by Dr. George H. Kress, editor of *California and Western Medicine*, he verified the status of the situation as related by Professor Penichet. In an account in his publication he pointed out its significance in relation to conditions in this country. The medical profession of our own country certainly cannot anticipate better treatment or more favorable consideration in relation to some of the schemes now being exploited here. Certainly the Cuban medical profession has been but poorly rewarded for some fifty years of trial of such practice in that country. Inevitably, the physician who in times of stress disposes of his medical birthright as a professional man finds himself the drudge of the group that has purchased his scientific freedom. The physicians in Cuba who are the employees of the mutual aid societies work day and night for a pittance and are so constantly driven by the excessive demands on their services that they are unable to give to any patient the individual medical attention necessary to intelligent and satisfactory medical care. The rich patrons under these contracts no doubt demand and receive better service than is rendered to the membership generally. The old psychologic and biologic laws which communistic propagandists would invalidate in reforming medical care go right on working and eventually invalidate the experiments."—*Journal of the American Medical Association*, August 27, 1932, pages 765-766.

HARRISON-STONE-HANCOCK COUNTIES MEDICAL SOCIETY.

September meeting will be held at the home of Dr. Rafferty, Pass Christian, Wednesday, September 7, at 7:30 P. M.

Papers by Drs. Carroll and Shipp.

Subject: Outstanding figures in early medicine.

There will also be a lawn party given by the Ladies' Auxiliary to which the members and their wives are invited.

E. A. Trudeau, Secretary.

Biloxi, Sept. 3, 1932.

JASPER COUNTY.

Dr. W. C. Simmons, formerly of Fouke, is now located in Bay Springs, with offices over the Johnston drug store.

J. B. Thigpen, County Editor.

Bay Springs, Sept. 4, 1932.

HINDS COUNTY.

Dr. Guy Verner of Birmingham has recently opened offices in Jackson, limiting his work to

pediatrics. His offices are located in the Standard Life Building.

Dr. and Mrs. L. W. Long are the proud parents of a fine young son, born August 16.

Dr. and Mrs. G. C. Russell, with their charming young daughter, have just returned to Jackson from Rochester where Dr. Russell spent most of his time at the Mayo Clinic.

Dr. and Mrs. Levy McCarty are receiving congratulations upon the arrival of a fine young ten-pound boy, born August 31.

Dr. T. J. Crofford, Jackson, has been confined to bed at the Baptist Hospital for about two weeks. We hope for him a speedy recovery.

The regular monthly staff meetings of the Jackson Infirmary and Baptist Hospital will be resumed in September. We hope that many doctors from out of town will take advantage of these splendid meetings.

Dr. and Mrs. H. C. Sheffield and family have just returned home after spending a most delightful two weeks at Stafford Springs.

Dr. Robin Harris has recently returned to Jackson after a most pleasant trip to California.

Dr. Thompson of Carthage has recently opened offices in Jackson for the general practice of medicine.

Dr. H. R. Shands is away on his regular summer vacation and will spend a time at the Mayo Clinic.

William F. Hand, County Editor.

Jackson, Sept. 5, 1932.

NESHOBA COUNTY.

Drs. W. R. Hand, W. H. Banks, A. L. Majure and J. S. Hickman attended the last meeting of the East Mississippi Medical Society which was held at the country home of Dr. B. L. Robinson, about three miles outside the city limits of Meridian. They all reported a fine time from the social as well as the business standpoint. Have us again, Dr. Robinson.

Drs. A. L. Majure, W. H. Banks and S. L. Perry, who live in the rural districts of Neshoba County, are seen a little more often in Philadelphia. I presume they are getting in the habit so that they can watch to see if their victims are selling any cotton. I don't think there is any use, boys, as what cotton is left after the Federal aid is paid and the gale has left won't pay for your trouble of staying up here.

Dr. J. S. Hickman has been indisposed for several weeks and several days ago he had Dr. Charlie Harrison to remove his tonsils. He is still sick, but is expecting a great improvement in the near future. This is the first time Dr. Hickman has attempted to practice any of his own preachings.

Dr. and Mrs. Granville Hand of Quitman visited friends and relatives here this week end.

We noticed that Dr. Baily of Meridian is visiting here this week end. At first we thought it was relatives who were the cause of Dr. Baily's many visits but now we know differently.

J. S. Hickman, County Editor.
Philadelphia, Sept. 5, 1932.

MONROE COUNTY.

"The melancholy days have come—the *dullest* of the year." The sad feature of the case is that your correspondent has, absolutely or nearly so, no news to submit to you, nor has he any kind of communication that he thinks might be of interest to our members. The weather has been too hot and I am too barren of original ideas to dare make any suggestions or advance any opinions either governmental or scientific. Yet I am under obligations to "punch the *bell*" (not the *ball* as I was made to say in my last). When I accepted the post of county editor, I tacitly agreed to answer present on each roll-call. "Do your duty tho' the heavens fall" has been a favorite slogan and admonition with me for all the years. So here I am tho' I come empty handed.

During the last month our town (Amory) has been visited by two of our young doctors who were of us but went out for us—they were reared here and their parents live here. These parents are justly proud (so are we all) of these young medicos. One of them is the son of Dr. I. P. Burdine, long a practitioner of our town and one of the most popular and brilliant members of our society. The young man is his father's name-sake, Ira Price Burdine, Jr. He is a graduate of the University of Mississippi and of Tulane, has served an internship at the Charity Hospital in New Orleans, and is now with Dr. Walley in Jackson. Ere long we expect to hear great things of him.

The other young fellow is (or was) a protege of mine. I refer to Dr. Clel Holland, now of Houston, Texas. He has been located there for about two years. He is also a product of "Ole Miss" and Tulane. After his interne year in Shreveport, La., he secured a fellowship at Crile's—more properly at the Cleveland Clinic. After two years there he went for a time to Baltimore and was under the tutelage of Hugh Young. From there he went direct to Houston, Texas, and "bearded the lion in his den." Keep your eyes on Clel Holland—he is bright—he is educated—he is equipped—he is well fitted for success and he will achieve it. We are proud of him.

In closing I must, with regret and much sorrow, chronicle a sad thing to us all—especially so to me—namely, the fact that our president, Dr. W. C. Spencer, of Tupelo, has suffered a slight paralytic stroke. He is improving and will, probably, soon be well again. But at a recent visit I made him, he told me that he did not expect to re-enter his work as physician. May God bless

and comfort him for we love him dearly.

Again, I report, with pain and sympathy with and for his son, our fellow member, Dr. W. A. Toomer (also of Tupelo), the death of his aging father. So it goes in life. All that counts in life is our friends and we enter into, both, their joys and their sorrows.

G. S. Bryan, County Editor.
Amory, Sept. 5, 1932.

CHAMBERLAIN-RICE HOSPITAL.

Dr. James C. Rice of the Chamberlain-Rice Hospital has announced that the officers and directors of the institution have decided to use only graduate nurses in the operation of the hospital. Nurses who are at present in training will be permitted to complete their courses but no new students will be accepted.

In speaking of the change, Dr. Rice pointed out that the National Association of Graduate Nurses has properly made a study of the supply of graduate nurses and has reached the conclusion that too many are graduated each year, producing a crowded condition in the profession that is leading to increased unemployment. The Association is urging that all institutions that can do so suspend the operation of their training schools and use graduate nurses until the period of this emergency is over. If, in due course of time, conditions become so that additional graduate nurses are required for the welfare of the public, the hospital will gladly return to the training school and do its part toward filling this need.

L. Wallin, County Editor.
Natchez, Sept. 7, 1932.

LEFLORE COUNTY.

Dr. E. R. Shurley has moved from Money to Glendora.

Dr. F. M. Sandifer has returned from the Mississippi Coast and New Orleans after a ten day's visit.

Drs. O. H. Swayze, Yazoo City, and B. H. Booth, Drew, were recent visitors to Greenwood.

Dr. G. H. Wood, Jr., of Longview, Texas, son of Dr. G. H. Wood, Batesville, and Miss Frances Gray, of this place, will be married here the latter part of October. They will make their home in Longview, Texas.

The Delta Medical Society will meet in Greenwood, Wednesday afternoon, October 12.

Dr. C. C. Applewhite, formerly of the State Board of Health, but now with the United States Public Health Service at Boston, Mass., visited our county health unit in September.

W. B. Dickins, County Editor.
Greenwood, Sept. 7, 1932.

JEFFERSON DAVIS COUNTY.

Dr. G. S. Bryan has moved from the northern part of the county to Oakvale in Lawrence County.

Dr. H. G. Williams is confined to his bed in the Jackson Infirmary where he has been since August 26, with duodenal ulcer. We are glad to report his gradual recovery.

Dr. G. C. Terrell, county health officer, reports a busy time this summer in health work, having held 50 typhoid clinics in the county and given more than 6,000 "shots." The people are more and more demanding this vaccination.

Dr. G. C. Terrell and family spent a few days the first of this month down on the coast on a vacation. He reports neither fish nor mosquitoes biting. They returned very much recreated.

G. C. Terrell, County Editor.

Prentiss, Sept. 7, 1932.

SIMPSON COUNTY.

As the result of the efforts of Dr. R. E. Giles, county health officer, Simpson County inhabitants are 90 per cent inoculated against typhoid fever.

The doctors on the staff of the State Tuberculosis Sanatorium meet regularly every Monday night. Every county doctor is invited to these meetings which are very instructive and beneficial.

Malaria is more prevalent in the county at present than it usually is at this season of the year.

I am glad to report that Dr. M. M. Magee, Magee, who was sick at the time of my last writing, is able to resume his work.

The family of Dr. W. W. Diamond has just returned from a very much enjoyed vacation.

It has been necessary to increase the number of nurses on the staff of the Magee Hospital due to the growing number of patients admitted. Personally, I think the manner in which this small hospital has been received and supported by the people goes to prove that every community should have a hospital, that it helps the community both commercially and socially, and that it aids in the general welfare of the people.

E. L. Walker, County Editor.

Magee, Sept. 7, 1932.

ISSAQUENA COUNTY.

Trip to Washington—Continued

I left off in my last installment where our train lit after sailing over the mountain tops near Lynchburg. After reaching earth again the relief was so great that I dozed off and slept from hades to the usual morning meal.

When I awoke we were nearing Petersburg. It is one of our country's oldest cities, full of historic interest. Many incidents occurred here that helped shape the destiny of our nation, and from its very infancy.

The country was level and sandy. In making the curves in this safe, level country I discovered that the outer rail was now highest. Why had they not built the railroad that way back on those mountain sides!

When we pulled in at the station a parade was passing, with bands playing and flags flying. The Confederate reunion was on in Richmond, and the Petersburg battlefield near by was to be dedicated that day. An old Confederate soldier, all the way from Texas, proposed that we stop over and see the ceremonies. He had been there during the siege sixty-seven years ago, and wanted to see the place again. Autos were at the train waiting for the veterans and their attendants, and we were soon driving over the battlefield.

After the usual patriotic speeches, songs and music we visited the siege lines and the site of the famous "crater." My old comrade was near by when the mine was touched off on that memorable occasion, and he gave me a vivid description of the scene. Part of a regiment of South Carolinians were caught and buried in their trenches by the mass of earth thrown up by the explosion. They were left where they died, literally buried alive. A similar incident occurred in one of the battles of the World War. Some allied soldiers were entrapped and buried in their trenches by earth thrown up by a terrific explosion. Only a line of bayonets sticking out of the earth remained to show where they met death. History repeats itself, but under what different surroundings did these two incidents occur!

We next went through the War Museum near the "crater." It is just a small affair, but in it were two things picked up on the battlefield that impressed me. One was two long, conical bullets locked together. They were probably well spent in their flight, and met at right angles, one ricocheting as it struck, wrapped itself partially around the other, holding it in firm embrace. The second was the meeting, point to point, in mid air, of two minie balls of the same calibre and velocity. The result of the impact was a flattened disc of molten lead about the size of a silver dollar, with a thin segment of the base of each bullet showing intact on each side of the disc. These two relics deserve a place in the "Believe It or Not" column.

Returning from the museum we stopped at Old Blanford Church and Cemetery. The church was built two hundred years ago. The cemetery is one of the most notable in the country. In it are buried soldiers of six wars, among them 30,000 Confederates.

Petersburg was settled about the same time as Jamestown. It has been an important strategic point in three wars. The first was the Revolutionary War, and next in the War of 1812. During the War Between the States, from the very beginning, it was the key to Richmond. Its fall, on April 2, 1865, sounded the death knell of the Confederacy.

We returned to the city over the famous "Jerusalem Road" leading from Petersburg to the

Jewish cemetery. I did not learn how it got its name.

We were soon aboard the train among a lot of jolly old Confederates returning from the dedication ceremonies. They were trying to sing their oldtime camp songs of near seventy years ago, and shouting with feeble, cracked voices, "On to Richmond."

(To be continued)

W. H. Scudder, County Editor.
Mayersville, Sept. 11, 1932.

PRENTISS COUNTY.

Born to Dr. and Mrs. W. H. Anderson on July 21, a daughter, Elizabeth Jane, at the Baptist Hospital in Memphis.

Dr. L. L. McDougal, formerly on the staff of the Mississippi State Hospital, Jackson, has recently returned to Booneville, where he will resume private practice.

Dr. W. M. Adams, who has been interning in New York City, is at home for a short visit. He will leave in a few days for Brooklyn where he will take a special course in eye, ear, nose and throat work, having an appointment in the Brooklyn Eye, Ear, Nose and Throat Hospital.

Dr. E. J. Green was a professional visitor to Booneville this week.

The Mississippi section of the Journal is growing lustily under the guidance of Dr. Lippincott. The doctor is to be congratulated on his excellent work.

R. B. Cunningham, County Editor.
Booneville, Sept. 10, 1932.

JACKSON COUNTY.

A joint meeting of the staff of the Jackson County Hospital and the Jackson County Medical Society was held September 8, with a good attendance. A number of cases were reported and discussed at length. The routine business of both organizations was transacted.

Since the last report Dr. J. F. Busey of Pascagoula has been elected to membership in the society and to the staff.

Dr. F. O. Schmidt, another recent addition to the medical forces at Ocean Springs, was also elected to the staff. He had been elected to membership in the medical society at the June meeting.

Dr. R. C. Eley underwent a nasal operation at the hospital last week and has fully recuperated.

We regret to report the death of Mrs. H. H. Colle of Pascagoula, secretary of the board of directors of the hospital and one of its most active members.

PROSPERITY PEEPING AROUND THE CORNER.

"dr mac please sir come to my house this morning august the 30 1932 fannie eckles

"i will have the money for you"

Note: Found on my desk on the morning of the above date.

S.B. McIlwain, County Editor.
Pascagoula, Sept. 9, 1932.

CLAIBORNE COUNTY.

The county health officer, Dr. W. N. Jenkins, has been busy giving typhoid vaccine. This work is principally being done among the negroes of the county.

Born to Mr. and Mrs. Paul Green, a son Paul, Jr. Mrs. Green is the daughter of Dr. A. L. Chapman, Hermanville.

W. N. Jenkins, County Editor.
Port Gibson, Sept. 10, 1932.

LAUDERDALE COUNTY.

Lauderdale County has sustained a distinct loss in the death of Dr. B. D. Pace of Bailey, on August 20. As he attended the meeting of the East Mississippi Medical Society of recent date, his going was sudden.

Dr. J. T. Gooze is leaving with his family across country, Saturday, September 10. He has a scholarship at Harvard University in Boston, Mass. We shall miss him and Mrs. Gooze and the three children greatly. They were entertained at their pastor's home for dinner last evening. This personage is Dr. R. H. Griffin, who serves not only his church but community interests as well.

Mrs. W. Jeff Anderson is improving at her home in Meridian following an illness and treatment in a hospital in Birmingham, Ala.

Dr. and Mrs. Leslie Rush have announced the birth of a daughter named Beryl. Mrs. Rush and baby have returned home from Rush's Infirmary.

Drs. A. C. Bryan and F. G. Riley have returned to their respective fields following absences from the city.

Dr. G. V. Galloway has resumed duties at the Lauderdale County health unit. He succeeds Dr. J. T. Gooze who has a leave of absence for study.

Dr. and Mrs. Charles T. Burt happily report the advance in school of their little daughter, Frances Milbrey Burt. Also, as temporary chairman, Mrs. Burt with Mrs. T. L. Bennett, temporary Secretary, are working towards the organization of an Auxiliary to the East Mississippi Medical Society.

Dr. Sara A. Castle, for many years a practitioner of medicine in the city of Meridian, and who for some time owned and was medical director of the Meridian Sanatorium recently was selected as physician for the Mississippi State College for Women at Columbus.

Dr. Castle is one of the best trained physicians

of the State and has done outstanding work in many phases of medicine, especially in the early years when pellagra first came in for consideration in this country. She contributed largely to the literature on that subject. She leaves for her new post of duty the fourteenth of September.

Dr. J. T. Googe, who has been director of the Lauderdale County Health Department since its establishment in 1928, leaves temporarily to accept a fellowship in the Harvard School of Public Health, Boston. Dr. D. V. Galloway, who for a number of years was director of Coahoma County Health Department, relieves Dr. Googe while he is on the fellowship. Dr. Galloway obtained his master's degree in public health at Harvard in June.

Charles T. Burt,
County Editor.

Meridian,
September 9, 1932.

NOXUBEE COUNTY

Dr. S. W. Salter has about recovered from the injury he sustained in an automobile accident in Memphis, Tenn., several weeks ago. He made a trip to Jackson recently, and also to Hazelhurst to visit his mother.

Dr. S. F. Hill made professional trips to Birmingham, Ala., twice during the month.

Our county has had splendid campaigns during July and August against typhoid fever and diphtheria. During the month of July, J. W. Dugger of the State Health Department vaccinated three thousand or more persons against typhoid and several hundred children against diphtheria. During the month of August your county editor who is also county health officer, with the assistance of Dr. S. F. Hill and Mrs. Gladys McKenzie, vaccinated 1600 against typhoid and 124 against diphtheria.

Miss Chambers, a graduate nurse, assisted in the work by vaccinating 140 against typhoid and 40 against diphtheria. At Cooksville, Dr. J. L. Melvin of Shuqualak, assisted by his son, Dr. G. D. Melvin, who was at home on vacation, gave 2400 typhoid vaccinations besides a number of diphtheria vaccinations. I venture to say that no other county in the state with a part time health officer can give a better record of immunizations. Other doctors in the county co-operated in the work but I did not get the data on what was done. We were glad to have Dr. Dugger with us to inaugurate the campaign which has resulted in such a large number being immunized against these diseases.

E. M. Murphey,
County Editor.

Macon,
September 9, 1932.

EAST MISSISSIPPI MEDICAL SOCIETY

The East Mississippi Medical Society met on Thursday afternoon, August 18, at the country home of Dr. B. L. Robinson, two miles out from Meridian. Guests of honor at this meeting were Dr. James M. Acker, Dr. L. S. Lippincott, Dr. Horton Casparis, associate professor of pediatrics, Vanderbilt University, and Mrs. W. C. Pool, president of the Women's Auxiliary to the Mississippi State Medical Association. There were seventy-eight present including members and guests.

The following program was presented:

1. Anemia in Disease.—Dr. L. S. Lippincott, Vicksburg. Discussed by Dr. Horton Casparis.
2. The Acute Surgical Abdomen.—Dr. E. L. Richardson, Louisville. Discussed by Drs. L. V. Rush, W. J. Anderson, K. T. Klein and W. R. Hand.

3. Diphtheria in Children.—Dr. F. G. Riley, Meridian. Discussed by Drs. G. L. Arrington, Horton Casparis, W. R. Hand and W. H. Banks.

Dr. Horton Casparis addressed the society on "Tuberculosis During Childhood."

Dr. James M. Acker made an official address, in which he lauded the work of the society and classed it as one of the foremost in the state.

Mrs. W. C. Pool addressed the doctors' wives relative to organizing a local auxiliary to the medical society.

After the meeting a picnic lunch was served. Dr. W. H. Banks acted as toastmaster.

The next regular meeting will be held at the Lamar Hotel, in Meridian on Thursday afternoon, October 20.

T. L. Bennett,
Secretary.

TIPPAH COUNTY

Dr. W. C. Walker, "The Grand Old Man from Houlka," has been here a few days this week, visiting his daughter, and mixing with his doctor friends. He lately has been in Memphis for treatment, and all his many friends are rejoiced in his improvement, and truly hope he may be among us for years to come.

Miss Elizabeth Merritt of Blue Mountain, daughter and grand-daughter of Tippah County doctors, has been seriously sick for several weeks. At this time she is considered to be well on the road to recovery to the delight of her family and many friends.

Dr. W. M. Adams, after some months' stay in New York, in one of the hospitals, has been home for some days. He is much improved in health, and expects to go to Long Island next month to take work in one of the hospitals.

Dr. John Tate, who completed his interne course in Charity Hospital, Shreveport, in June,

has gone to Philadelphia, Pa., where he is in a hospital.

Dr. A. V. Murry, who received his degree at Tulane in June, and then secured a Mississippi license, has gone to Shreveport to serve his internship. This city seems to be favored by the students from this county, as we have had one there for the past three years. Dr. H. P. Clemmer, Ripley, two years ago, Dr. John Tate, Blue Mountain, last year, and now Dr. A. V. Murry, Ripley.

The county health officer, with the help of doctors in the several districts, has been busy giving typhoid vaccine the past month. In addition diphtheria vaccinations are to be given the balance of the year by the county health officer, the Board of Supervisors having provided for this.

Miss Mary Miller Murry has gone to Kosciusko where she will teach this session.

C. M. Murry,
County Editor.

Ripley,
September 9, 1932.

WINSTON COUNTY

Our community is as a rule extremely healthy. Some typhoid and some malaria existing.

Dr. W. W. Parks spent a few days this week in New Albany visiting.

Dr. and Mrs. Bernard Hickman went to Meridian shopping one afternoon this week.

Dr. S. W. Pearson spent a few days in Memphis on business this week.

Mrs. M. L. Montgomery spent a few days in Memphis visiting friends last week-end.

Dr. W. A. Young was on the streets in our city this week, and as the rest of us, spoke of having extreme leisure these days.

We have had several patients sent to Meridian and other hospitals this month for treatment.

We appreciate so much the genuine courtesy shown us now by the doctors in charge of the charity hospitals.

M. L. Montgomery,
County Editor.

Louisville,
September 9, 1932.

YAZOO COUNTY

Drs. W. E. Noblin and N. C. Womack of Jackson spent a few days fishing in Yazoo County last week. We hope they had luck and it will be all right if they only carried fish with them to Jackson.

Dr. John Darrington, Yazoo City, made a hurried trip to Memphis as a guest at a banquet

given in honor of Dr. J. A. Crisler. I know all had a royal time.

Dr. L. Q. Hall of McComb has recently located at Benton. We are glad to have Dr. Hall with us.

Dr. Busby of Phoenix was operated upon at the King's Daughters' Hospital, Yazoo City, last week and is reported doing well.

Dr. C. H. Hogan died at Satartia on August 18 and was buried in Yazoo City on August 19. Sorry to note his passing.

We hear Dr. Joe Roberts is doing well at his new home in Longview, Texas.

C. M. Coker,
County Editor.

Eden,
September 7, 1932.

AN OPENING

"Satartia, Mississippi,
"September 8, 1932.

"Since Dr. Hogan died, we have no doctor here at all and we need one. Its a dandy good location for a country doctor and any good doctor can do well here. If you should have occasion to hear or see a doctor looking for a location send him up. He can go to work at once. We have very good crops,—cotton and seed both bringing very good price.

"If you can help us, sure will appreciate it.

"Yours truly,
"G. R. Lewis."

PONTOTOC COUNTY

Health of the county is fine. Very little sickness. Most any day can see three or four out of town physicians.

Dr. C. D. Mitchell of Jackson made us a short visit yesterday.

Dr. J. U. Abernethy, recently of Marks, now located at Troy, was operated on a few days ago at the Baptist Hospital at Memphis, Tenn.

Our next Northeast Mississippi Thirteen Counties Medical Society meets at Houston.

No deaths, births or marriages in the medical families of the county.

R. P. Donaldson,
County Editor.

Pontotoc,
September 5, 1932.

LAWRENCE COUNTY

I am enclosing a clipping from the little county paper at Monticello in which is the report of our medical association meeting. I am sending it as my report from Lawrence County. I am economizing, you see. There is not much to report from this county and Dr. Frizell usually beats us to these county meetings.

"A meeting of the Tri-County Medical Society was held in the courthouse here Tuesday with Dr. A. B. Harvey of Tylertown, president, presiding and Dr. H. R. Fairfax of Brookhaven serving as secretary. There were representatives present from Lincoln, Lawrence and Walthall counties with Dr. J. Gould Gardner of Columbia present from Marion County. . . . Announcement was made of the next meeting which will be held in Brookhaven in December and of the district meeting embracing a larger number of counties to be held on October 11 at McComb."

B. S. Waller,
County Editor.

Silver Creek,
September 15, 1932.

EIGHTH COUNCILOR DISTRICT

The annual meeting of the Eighth Councilor District will be held at 12 noon, October 11, at the Methodist Church, McComb. The program as announced by Dr. W. H. Frizell, Brookhaven, councilor and chairman, and Dr. T. Paul Haney, Jr., McComb, secretary, is as follows:

PROGRAM

Lunch, 12 noon, Methodist Church.

1. Dr. R. A. Strong, Professor of Pediatrics, Tulane University, "Aspiration Treatment of Empyema in Children."
2. Dr. N. F. Thiberge, New Orleans, Louisiana, "Some Interesting Cases of Allergy," illustrated.
3. Dr. F. E. LeJeune, Professor of Otolaryngology, Tulane University, "Hoarseness," with moving picture demonstrations.
4. Dr. G. C. Anderson, Professor of Neurosurgery, Tulane University, "The Diagnosis and Localization of Brain Tumors."
5. Dr. J. H. Musser, Professor of Medicine, Tulane University, "The Management of Thyroid Disease."
6. Dr. J. M. Acker, Jr., President, Mississippi State Medical Association,—an address.
7. Dr. J. W. D. Dicks, President-elect, Mississippi State Medical Association.—an address.
8. Dr. J. Gould Gardner, President, Mississippi State Hospital Association,—an address.

PIKE COUNTY MEDICAL SOCIETY

The Pike County Medical Society had its regular meeting September 1. A most interesting clinic was held during the afternoon from 1:30 to 4:00 p. m., at which Dr. James S. McLester, Professor of Medicine, University of Alabama, received patients for consultation. Each physician presented his own patients to Dr. McLester. At 6:30 p. m. dinner was served at the Baptist Church after which Dr. McLester gave a most

interesting and beneficial lecture on "The Course and Treatment of Nephritis."

The Pike County Medical Society will hold its regular October meeting in conjunction with the Eighth Councilor District Medical Meeting, October 11, at McComb.

T. Paul Haney, Jr.,
Secretary.

McComb,
September 12, 1932.

WASHINGTON COUNTY

Dr. T. F. Willson of Arcola was recently elected to a place on the Board of Directors of the Washington County Chapter of the American Red Cross.

Dr. John Fair Lucas of Greenville attended the meeting of the Central Association of Obstetricians and Gynecologists at Memphis, Tennessee, September 15 to 17.

Drs. Payne, Hirsch, Beck and Eubanks are now located in their new offices on the second floor of the Weinberg Building, in Greenville, which were recently remodeled so as to give them more space than they occupied on the fourth floor of the same building. These offices were arranged to suit their particular needs and are modern in every respect.

Dr. and Mrs. Paul Gamble of Greenville have recently adopted two small orphan children, a boy aged two years who was given the name of Paul, Jr., and a girl, six months old who was named Mary.

Dr. O. H. Beck of Greenville spent a most enjoyable week on the Gulf Coast early in September with a party of four other Greenville citizens, on a fishing trip after the "big ones."

The many friends of Dr. H. R. Miller of Lamont and Greenville are very sorry to learn that he has been in quite bad health for some weeks now, and all are wishing for him a speedy recovery.

Dr. J. A. Beals of Greenville will read a paper on "Modern Urographic Methods" before the meeting of the Delta Medical Society, which meets in Greenwood on October 12.

Dr. and Mrs. Paul Gamble and two children visited friends and relatives in Nashville, Tennessee, lately.

Most all of the doctors of Washington County are making their plans to attend the meeting of the Delta Medical Society in Greenwood on the second Wednesday in October. Greenwood always furnishes a good meeting.

F. M. Acree,
County Editor.

Greenville,
September 10, 1932.

OKTIBBEHA COUNTY

Dr. Felix Long has recently returned from a trip with his son, Felix, Jr., who was on Eagle Scout Flight through Old Mexico. Both report a wonderful time.

Dr. J. W. Eckford recently enjoyed a fishing trip out on the gulf from the Mississippi coast.

J. S. Scales, son of the late Dr. S. W. Scales of this place, recently married Miss Frances Summers Ray, daughter of Rev. and Mrs. J. D. Ray of this place. Mr. Scales and his bride will be domiciled at Aberdeen, where he is teacher and coach in the high school.

H. L. Scales,
County Editor.

Starkville,
September 9, 1932.

SARPHIE-FRIZELL

Dr. and Mrs. W. H. Frizell
announce the marriage of their daughter
Elizabeth

to

Mr. Jack Ellis Sarphie
on Thursday, the eighth of September
Nineteen hundred and thirty-two
Brookhaven, Mississippi.

SOUTH MISSISSIPPI MEDICAL SOCIETY

The South Mississippi Medical Society met in Laurel, September 8, at 3 p. m., and the following program was carried out:

Address of Welcome.—Hon. G. W. Hosey, Mayor-elect of Laurel.

Response.—Dr. H. L. McKinnon, Hattiesburg.

The Doctor in the Court Room.—Hon. Ellis B. Cooper, Laurel.

Professional Ethics.—Dr. H. S. Tucker, Laurel. Discussed by Drs. J. R. Kittrell and A. M. Harrelson.

Stricture of Oesophagus.—Dr. Lucien Landry, New Orleans. Discussed by Drs. L. B. Hudson and J. S. Gatlin.

Hookworm Disease, A new Treatment.—Dr. Harvey Garrison, Sr., Jackson. Discussed by Dr. Joe Green, Laurel.

Tumors of Bladder.—Dr. Edgar Burns, New Orleans, La. Discussed by Dr. R. T. McLaurin.

Mitral Regurgitation.—Dr. B. F. Hand, Waynesboro. Discussed by Dr. B. T. Robinson.

The banquet was served immediately after the meeting at the Pinehurst Hotel. There were 73 doctors present at this meeting which was a record. We felt honored to have the President of the State Medical Association, Dr. James M. Ack-er of Aberdeen, with us and also Dr. F. J. Underwood and Dr. H. C. Ricks of the State Board of Health in Jackson.

Dr. F. T. Bower of Hattiesburg is spending his vacation in Detroit, Mich., with his parents, Mr. and Mrs. D. L. Bower. He will visit some of the larger clinics in the east while there.

Dr. H. K. Rouse, Jr., son of H. K. Rouse, Sr., Chancery Clerk of Pearl River County, has completed his internship at the Louisiana State Charity Hospital, New Orleans, La., and has located at Ponchatoula, La., for the practice of his profession. I am sure that we shall soon be hearing of the good work that he is doing.

Dr. L. B. Hudson has returned from a vacation on the Gulf Coast at Ocean Springs.

J. P. CULPEPPER, JR.,
Secretary.

Hattiesburg,
September 14, 1932.

NORTH-EAST MISSISSIPPI THIRTEEN
COUNTY MEDICAL SOCIETY

The regular quarterly meeting of the North-East Mississippi Thirteen County Medical Society was held in the First Methodist Church at Houston, Tuesday, September 20, at 2 p. m. The program as announced by the secretary, Dr. J. M. Acker, Jr., Aberdeen, was as follows:

1. Meeting Called to Order.—Dr. W. C. Spencer, President.

2. Invocation.—Rev. W. C. Steward.

3. "Some Practical Reflections on the Present Day Status of the Medical and Surgical Treatment of Goiter."—Dr. E. M. Holder, Memphis, Tenn.

4. Address.—Dr. J. G. Garner, Columbia, President, Mississippi State Hospital Association.

5. "Community Hospitals and their Relation to Medical Education."—Dr. J. A. Rayburn, Pontotoc.

Discussion opened by Drs. Anderson and Caldwell.

6. "Pulmonary Hemorrhage with Special Reference to Treatment."—Dr. W. A. Toomer, Tupelo.

Discussion opened by Drs. J. W. Eckford and B. J. Shaw.

7. "Diabetes Mellitus."—Dr. S. K. Gore, Mantee.

Discussion opened by Drs. Deanes and Aycock.

8. "Pneumonia."—Dr. F. L. McGauhy, Calhoun City.

Discussion opened by Drs. Honnoll and Neel.

9. Business Session.

10. Banquet immediately after adjournment in the banquet hall of the Masonic Building. Doctors and their wives are especially urged to remain for this banquet.

MISSISSIPPI STATE BOARD OF HEALTH

Within the next few weeks, Dr. James R. McCord, Professor of Obstetrics and Gynecology, Emory University School of Medicine, will give courses of lectures on obstetrics and gynecology at the following places: Grenada, Booneville, Kosciusko, and Clarksdale. Physicians from the surrounding territory from each point are cordially invited and urged to attend.

Dr. A. L. Gray, Director of the Copiah County Health Department, and Dr. J. T. Googe, Director of the Lauderdale County Health Department, have left for Harvard University where they will study for a year.

Dr. George E. Riley, for the past several years in charge of malaria control activities of the State Board of Health, has been awarded a fellowship for one year's study at Johns Hopkins University.

Dr. C. C. Applewhite, who has been assigned by the U. S. Public Health Service to Mississippi as Director of the Bureau of County Health Work, State Board of Health, for the past ten years, left last week for Boston. Dr. Applewhite will act as an instructor in the School of Hygiene and Public Health and at the same time will work on his master's degree in public health.

The following resolutions were adopted by the State Board of Health at its meeting on June 27:

"Having cognizance of the untiring and valuable services performed by Dr. C. C. Applewhite since the beginning of his association with the Mississippi State Board of Health, the members of the Board, in regular meeting assembled on June 27, 1932, wish to express to Dr. Applewhite their appreciation of his services as a public health official.

"There are ample fruits of Dr. Applewhite's labors for the enrichment of the citizenship of those counties in Mississippi having full-time health departments. In these counties, there are striking evidences of practical achievements under his guiding hand. The effectiveness of the public health program owes much to his participation. In the three phases of public health work, education, vaccination, and sanitation, perhaps his most outstanding accomplishments have been in the field of sanitation.

"Dr. Applewhite has not only served his church well but has carried religion into his business and wherever he has gone. Integrity, ability, and loyalty are brought into high relief in his life.

"It is with regret that the Board learns that Dr. Applewhite will be transferred from Mississippi in October of this year and each member of the Board extends best wishes for his success in the future."

(Taken from minutes of the June 27, 1932, meeting of the State Board of Health.)

TRI-COUNTY MEDICAL SOCIETY

The Tri-County Medical Society met in regular quarterly session in Monticello, September 13, at noon. After lunch at the hotel, members repaired to the county court house for the scientific program. Dr. A. B. Harvey, Tyler-town, is president of the Society and Dr. H. R. Fairfax, Brookhaven, is secretary. There were fifteen present.

Dr. J. Gould Gardner, Columbia, President of the Mississippi State Hospital Association, was the guest of the Society and made an official address on Community-Hospital matters and correct hospital plans for betterment of the indigent as well as other classes of people.

The scientific program as follows was given and evoked much constructive comment.

Dr. B. S. Waller, Silvercreek, gave an excellent paper on "Pellagra," which was well received and discussed.

Dr. J. W. Wilson, Monticello, next read a valuable paper on "Advantages of the Small Laboratory." He gave the benefits derived even from a small office outfit. This paper met with much applause.

Dr. O. N. Arrington, Brookhaven, gave an extended discussion on "Gastric and Duodenal Ulcers," and quoted from many able contributors to this quite common ailment. This paper brought out many valuable thoughts.

Dr. W. R. May, Brookhaven, being unavoidably detained by official duties, was unable to give his paper on "Prevention of Infectious Diseases in School Children."

President Harvey named the regular committees for the annual meeting for December 13, to be held in Brookhaven, where the annual banquet will be given.

Dr. M. E. Arrington was elected to membership in the Society. He has recently opened an office in Brookhaven.

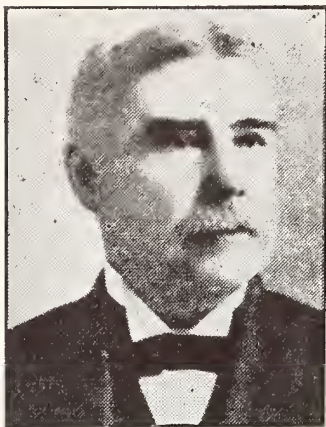
Dr. W. P. Tucker left Brookhaven today for his new location in Arizona. Dr. Tucker while in Brookhaven made a most favorable impression on the doctors here as well as his clientele. He has the profession's best wishes in his new field.

Brookhaven doctors attended this meeting 100 per cent,—every doctor being present. This is a record attendance.

W. H. Frizell,
County Editor.

Brookhaven,
September 13, 1932.

LEST WE FORGET THEIR GOOD WORKS



H. H. HARALSON, M. D.

Forest

President, Mississippi State Medical Association,
1895-1896.

Hugh Hardin Haralson was born in Wetumpka, Ala., March 10, 1854, his father and mother being natives of Georgia. Dr. Haralson, the youngest in a family of eleven children, was educated at Cooper Institute, Lauderdale County, Miss., entered the drug business in Harpersville in 1877 and was graduated from Tulane Medical College in 1883. He began the practice of medicine in Harpersville but shortly after went to Forest and later to Biloxi, from which place he moved to Vicksburg in 1898. He served on the State Board of Health for twelve years, being successively appointed by Governors Stone, McLaurin and Longino, and was actively engaged in the epidemics of yellow fever in 1897, 1898 and 1899. He also served as a representative of the State Board during the epidemic of 1905.

Dr. Haralson was elected recording secretary of the Association in 1886 and served for several years, making an excellent record as an executive officer. In 1897 he founded the Mississippi Medical Record which he turned over to the Association the next year, resuming publication of it in 1900 when it was abandoned by the Association.

In 1878 Dr. Haralson married Miss Belle Lack of Harpersville and to this union were born seven children. The one son, Guy, enlisted in the Medical Corps for the World War and died of influenza at Camp Shelby.

Dr. Haralson's second marriage was with Miss Janestine Coats and the union has proven a most happy one.

NOTE—If anyone knows of any additions or corrections that should be made to the above sketch, please communicate with Dr. E. F. Howard, Historian, Vicksburg.

WOMEN'S AUXILIARY TO THE MISSISSIPPI
STATE MEDICAL ASSOCIATION

MRS. LEON S. LIPPINCOTT,

Vicksburg, Press and Publicity Chairman.

President—Mrs. W. C. Pool, Cary, Miss.

President-elect—Mrs. F. L. Van Alstine, Jackson.

State Convention, Jackson, May 9, 10 and 11,
1933.

A MESSAGE FROM THE STATE PRESIDENT

As this is club season, I want to remind the physicians' wives of the auxiliary and ask them to remember to devote a little time to the organization with as much thought and sincerity as the routine club program. The two can be worked together as well.

I want especially to commend the Harrison-Stone-Hancock Auxiliary for its splendid work. Regardless of the heat, depression and storm, they continue their interesting meetings.

I had a most delightful trip to Meridian, August 18. Although I failed to form an auxiliary that day, I feel that the ladies are getting interested and they are making an effort to arouse enough interest to organize. Trust they are successful and I assure them I am wishing well for them.

Judging from report from North Mississippi Hinds County, Homochitto Valley and Issaquena-Sharkey-Warren Counties Auxiliaries, they have accomplished a good deal during vacation time.

I urge the membership, Hygeia and all committee chairmen to become active and get their committees functioning as much as possible.

The splendid co-operation of all is making it much better for me, and I am so grateful, not only to the ladies but also to the doctors.

Each auxiliary has been furnished a supply of the new secretary's record sheets and cards recommended by the National President, Mrs. Walter Jackson Freeman, Philadelphia, also supplied with a copy of the constitution and by-laws, which was approved at the June Board meeting. These copies were sent that all might be familiar with them, as they will come before the 1933 annual meeting for adoption.

With the continued splendid co-operation of each one, I feel that we can accomplish much during this season.

Best wishes to all,

Mrs. W. C. Pool.

Cary,

September 10, 1932.

HINDS COUNTY

Dr. and Mrs. Lawrence W. Long, on the morning of Tuesday, August 16, in the Baptist Hospital, welcomed a fine little son, Lawrence Wilburn, 3rd.

Mrs. H. R. Shands left for Texas August 25, to visit her sister, Mrs. Gibbs.

Dr. H. R. Shands left for Colorado August 28.
Mrs. W. L. Hughes.

Jackson,
September 10, 1932.

SHARKEY COUNTY

Dr. and Mrs. Few spent their vacation in the Ozarks of Arkansas and had a wonderful trip.

Mrs. L. E. Martin and daughter, Lady Mary, visited Jackson on the 7th of September. Lady Mary leaves soon for M. S. C. W. where she is a Junior this year.

Dr. and Mrs. Stribling visited Philadelphia friends and relatives.

Mr. Logan McCain, secretary of the Mississippi State Tuberculosis Association, was a visitor in Cary, conferring with Mrs. W. C. Pool and Mrs. Goodman about the Christmas tuberculosis seal sale to be put on in December.

Mrs. H. S. Goodman.

Cary,
September 10, 1932.

WARREN COUNTY

Dr. and Mrs. George Street had as their guest in August, Mrs. Street's niece, Miss Eve'lyn Towers, of Rome, Georgia.

Dr. and Mrs. J. S. Ewing and son, Jack, have returned from a visit to the coast.

Miss Emmy Lou Lippincott, daughter of Dr. L. S. Lippincott, has departed for Columbus, where she will be a student at M. S. C. W.

Dr. and Mrs. Laurence J. Clark had Mr. and Mrs. Hugh McLaurin of Chicago as their house guest last month. While here the stork visited Mrs. McLaurin, presenting her with a small daughter. Mrs. McLaurin is the sister of Mrs. Clark.

Dr. and Mrs. W. H. Parsons and daughters are entertaining Miss Ruby Parsons, sister of Dr. Parsons.

Dr. Guy Sanderson's motor boat seems to be very popular these days, as he has acted as host to several informal parties aboard.

Dr. and Mrs. Hugh H. Johnston and charming little daughter, Martha Ann, from Rochester, Minn., and Mrs. Johnston's sister, Miss Polly Pond, who has been spending the summer with them, have arrived in Vicksburg to visit their parents, Dr. and Mrs. Sidney Johnston, and Mr. and Mrs. J. D. Pond.

Dr. and Mrs. Charles F. Clayton and family have departed for their home in Knoxville, Tenn., much to the regret of their new friends made here. Dr. Clayton has been here two years, being connected with the Vicksburg Infirmary and the State Charity Hospital.

Dr. and Mrs. Edley H. Jones and son are spending a few days this month on the Gulf

Coast. Dr. Jones expects to do some fishing while away.

Mrs. A. J. Podesta, wife of Dr. Podesta, superintendent of the State Charity Hospital, has returned from New Orleans, where she was the guest of her son, Volney Liddell, who is a medical student at Tulane University.

Benson Martin, Jr., son of Dr. and Mrs. B. B. Martin, will resume his studies of medicine at Tulane University this fall.

Dr. A. Street won first place in a local golf tournament staged at the National Park Golf Club on Labor Day.

Mrs. H. H. Haralson.

Vicksburg,
September 12, 1932.

AUXILIARY ENTERTAINS AT ANNUAL NURSES PARTY

The Women's Auxiliary to the Issaquena-Sharkey-Warren Counties Medical Society gave its annual party for the student nurses and student clinical laboratory technicians at the Y. M. C. A. on September 14.

Lunch was served at beautifully decorated tables, and at the beginning of the meal, the fun began. Song followed song, and after supper each of the delegations, those from the Mississippi State Charity Hospital, Vicksburg Infirmary, Vicksburg Hospital and the Vicksburg Sanitarium made splendid original contributions to the program.

The doctors' wives also had a part to play, and every one present enjoyed each other's efforts. After the various "stunts" had been put on, about fifty guests took advantage of the lovely swimming pool, while the remainder of the party enjoyed being spectators in the balcony.

Ninety-seven people were present, and all reported a marvelous time. The following ladies were responsible for the evening's entertainment. Mrs. E. F. Howard, general chairman, with Mrs. B. B. Martin, Mrs. Vincent Bonelli, Mrs. George Street, Mrs. Willard Parsons and Mrs. Laurence J. Clark assisting.

Miss Helen Boswell, daughter of Dr. Henry Boswell, Sanatorium, will attend Millsaps College, Jackson, this year.

Miss Boswell won the highest honor which can come to a student at Whitworth College, last year, when she was awarded the Founder's Medal at the close of last session. Leading to this recognition, she had served as president of the student body, as a regular contributor to the "Whistle," college publication, as president of Phi Theta Kappa, honorary sorority, and vice-president of the State Student Government Association.

On September 8, Miss Elizabeth, daughter of Dr. and Mrs. W. H. Frizell of Brookhaven, became the bride of Jack Sarphie, son of Mr. and Mrs. E. Sarphie, of McComb. The ceremony was performed in the Frizell home, Dr. C. W. Crisler, Methodist pastor, officiating.

After a brief honeymoon in New Orleans, the couple will make their home in Brookhaven where the groom is engaged in the theatre business.

An auxiliary to the East Mississippi Medical Society will be organized. A temporary meeting was held in connection with the bi-monthly meeting of the doctors at the home of Dr. B. L. Robinson, during the month of August, with Mrs. W. C. Pool, State Auxiliary President, as guest of honor. Mrs. C. T. Burt was named temporary chairman and Mrs. T. L. Bennett temporary secretary.

Mrs. Burt later called a meeting of all women of the four counties who are eligible to membership in the auxiliary. The district includes Lauderdale, Neshoba, Winston and Newton Counties.

We hope to get a detailed account of this new auxiliary, and wish them well in their newly organized auxiliary.

HONOR ROLL

The following have contributed to this number of our Journal, for which your editors thank you:

COUNTY EDITORS—L. Wallin, W. N. Jenkins, William F. H. and W. H. Scudder, B. S. McIlwain, J. B. Thigpen, G. C. Terell, C. T. Burt, W. B. Dickins, W. H. Frizell, G. S. Bryan, J. S. Hickman, E. M. Murphey, H. L. Scales, R. P. Donaldson, R. B. Cunningham, E. L. Walker,

C. M. Murry, F. M. Acree, M. L. Montgomery, C. M. Coker—21.

COUNTY MEDICAL SOCIETIES—East Mississippi, Harrison-Stone-Hancock Counties, Issaquena-Sharkey-Warren Counties, Jackson County, Northeast Mississippi Thirteen Counties, Pike County, South Mississippi, Tri-County, Eighth Councilor District—9.

HOSPITALS—Vicksburg Hospital, Chamberlain-Rice Hospital, Vicksburg Sanitarium, King's Daughters' Hospital, Greenville; Mississippi Baptist Hospital, Jackson County Hospital—6.

WOMEN'S AUXILIARY—Mrs. W. C. Pool, Mrs. W. L. Hughes, Mrs. H. S. Goodman, Mrs. H. H. Haralson, Mrs. Leon S. Lippincott—5.

OTHER CONTRIBUTORS—W. H. Parsons, F. J. Underwood, J. B. Hirsch, E. F. Howard, A. Street, R. A. Street, Jr., G. C. Jarratt, W. G. Weston, G. R. Lewis—9.

GRAND TOTAL—50.

SPECIAL HONORARY CONGRATULATIONS:

To Dr. E. F. Howard, Vicksburg—has contributed to every number for the past 17 months.

To Dr. G. S. Bryan, editor for Monroe County—has missed one number in the past 17 months; none in the past 12 months.

To Dr. R. P. Donaldson, editor for Pontotoc County—has missed one number in the past 16 months; none in the past 10 months.

To Dr. W. B. Dickins, editor for Leflore County—has not missed since his appointment—10 months.

To Dr. B. S. McIlwain, editor for Jackson County—has not missed in the past 10 months.

To Dr. M. L. Montgomery, editor for Winston County—has missed three times in the past 17 months; none in the past eight months.

IT IS SUCH SERVICE THAT MAKES OUR MISSISSIPPI SECTION OF THE JOURNAL.

MEDICINE.—There are more physicians relative to population in the United States than in any other country in the world—about 156,440 in 1931, representing 1 doctor to every 800 inhabitants. The number of doctors, however, is not increasing as rapidly as population, and the Commission on Medical Education estimates that the number of doctors in the United States will probably decrease until about 1945, at which time an upward trend will begin. While the present supply of doctors may be adequate for the country as a whole, distribution is uneven, varying from 1 doctor to every 1,400 persons in South Carolina and Montana to 1 for every 500 persons in California. Three-fourths of all physicians are general practitioners, and one-fourth are specialists.

It is recently reported that specialism has probably been developed beyond the actual needs

of individuals and the community. In 1928 there were 19,277 specialists who limited their practice, and as many more who were interested in but not limited to a medical specialty. Of the specialists, 29 per cent limited their practice to head specialties, which include ophthalmology, otology, laryngology, and rhinology; 18 per cent general surgery; 15 per cent internal medicine; 6 per cent neurology and psychiatry; 5 per cent urology; 5 per cent obstetrics and gynecology; 5 per cent pediatrics; 4 per cent Roentgenology; 3 per cent public health; 2 per cent dermatology; 2 per cent orthopedic surgery; 2 per cent pathology and bacteriology; 2 per cent tuberculosis; 1 per cent proctology; and 1 per cent anesthesia. One-fourth of all doctors are interested in specialties, and half of these limit their practice as indicated above.—Walter J. Greenleaf, U. S. Department of Interior, Office of Education, 1931.

BOOK REVIEWS

The Medical Service of the Homestake Mining Company: By Louis S. Reed, Ph. D. Chicago, University of Chicago Press. 1932. pp. 54. Price, \$0.60.

This report, Number 18 of the publications of the Committee on the Costs of Medical Care, represents a study of medical service in a mining town in South Dakota. The general tendency of this report is to accentuate a type of service usually spoken of as contract service, to point out some of its advantages as well as its disadvantages.

J. H. MUSSER, M. D.

The Youngest of the Family: By Joseph Garland, M. D. Cambridge, Mass., Harvard University Press. 1932. pp. 196. Cloth. Price, \$2.00.

The title of this book at once suggests that it might be a book of fiction but it really is not. It is devoted to the care and training of the child. The book is very well written and planned, and to the writer's opinion it is the most up-to-date on this subject. Several chapters are especially good, the one on Growth and Development is most modern in every detail. The section dealing with Mental Growth is very complete and the summaries of the mental ages are most useful. Another chapter well written and full of the most modern views is the one on General Health Principles.

This book is an excellent one for the physician to recommend to young mothers and also an excellent volume for the physician to have at hand for ready information.

JULIAN GRAUBARTH, M. D.

Medicine Among the American Indians: By Eric Stone, M. D. New York, Paul B. Hoeber, Inc. 1932. pp. 139. Price, \$1.50.

This is the newest and most interesting volume in a very instructive and entertaining series of pocket size books.

I. L. ROBBINS, M. D.

Clinical Interpretation of Laboratory Reports: By Albert S. Welch, A. B., M. D. Philadelphia, P. Blakiston's Son & Co., Inc. 1932. pp. 366. Price, \$4.00.

A timely book and one that the general practitioner must welcome. A careful study will keep him abreast of the times and make possible a more intelligent interpretation of the laboratory data submitted to him.

I. L. ROBBINS, M. D.

Classic Descriptions of Diseases: By Ralph H. Major. Baltimore, Charles C. Thomas. 1932. pp. 630. Price, \$5.50.

This book, one of the most delightful I have had the opportunity of looking over in a long time, contains abstracts of many, one might almost say most, of the important classic medical contributions which are presented as translations from the original when not written in English. The work, representing a really definite contribution to medical history, contains the material which Dr. Major has been many years collecting. The medical world is to be congratulated that he has had this particular and interesting hobby and that he has taken the time and the trouble to get together all of the material contained between the two covers of the book.

The first chapter of the book contains important selections from writings on the infectious diseases, the second chapter on diseases of metabolism, then follows chapters with original descriptions of lead poisoning, diseases of the circulatory system, the blood, respiratory diseases, deficiency diseases, diseases of allergy and the digestive tract. Picking at random some of the extracted original description of diseases one notes the historic presentation by Fracastorius on syphilis, or the French disease; that of Hutchinson on the teeth as a means of diagnosing heredito-syphilitic struma; Hippocrates' description of epidemics of tuberculosis, and Laënnec's contribution on the physical signs of tubercle. Some of the accounts are not by physicians. An extract is taken from the Decameron, while Daniel Defoe's Journal of the Plague Year is quoted. There is a section on diphtheria, in which Bretonneau's treatise on diphtheria, the first definite separation of the disease as a nosologic entity, is presented in part. Gerhard's most casual but historic differentiation of typhus fever and typhoid fever is given place in the book. It would be impossible to mention all of the great contributors to medical literature that have been selected to republish, but lest it be thought that all of the selections are entirely from the past it should be mentioned that Opie's contribution on hyaline degeneration of the pancreas is extracted and Banting's announcement of his epoch-making, Nobel Prize discovery of insulin also is selected. Among living medical men, Pierre Marie, whose report on two cases of acromegaly is of historic significance is likewise honored, as are George Dock and James B. Herrick. To Herrick is given the honor of two extracts, the one from his description of coronary occlusion which first aroused interest in this condition throughout the world, and the second on sickle cell anemia. Of course,

there are half a dozen or more examples from Laënnec's writings.

In addition to the original reports, Dr. Major has supplemented most of the extracts by brief and interesting bibliographic sketches or a few comments upon the author whose selections follow. These short paragraphs, added to the original descriptions, make the book phenomenally interesting and of very real value. The abundant and appropriate illustrations add still more to the work. It should be in the hands of any one with the slightest interest in medical history.

J. H. MUSSER, M. D.

Medics, or the Glory of Man: By James A. DeMoss. Author, 1931. pp. 148.

A small volume of poems and sonnets by a physician conscious of the true intent of his noble profession. The poems treat of high ideals, lofty ambitions and noble loves of man for man.

I. L. ROBBINS, M. D.

Fungous Diseases: A Clinico-Mycological Text: By Harry P. Jacobson, M. D. Springfield, Ill., Charles C. Thomas. 1932. pp. 317.

This treatise on this very important branch of medicine, which has filled so many pages of medical literature, would keep the alert physician of the past generation spell-bound until the last page had been read, were he to return to this life and find this book on his desk.

So many diseases have been isolated from the group of diseases of whom the causative agent was unknown in this past decade and so much has been learned about the diseases which were named but poorly differentiated, that a modern up-to-date concise monograph of this sort is a real needed addition to our book shelf. Both for reference and for teaching.

The text is well balanced in description, diagnosis, prognosis and treatment of fungous diseases, which were spoken of as tropical diseases a few years ago, but which, are so wide spread geographically, that they are the topic of every gymnasium, school or golf club gathering.

We owe much to Dr. Jacobson for this useful contribution.

M. T. VAN STUDDIFORD, M. D.

Essentials of Pediatric Nursing: By Ruth Alice Perkins, R. N., B. S. 2d ed. rev. and enl. Philadelphia, F. A. Davis Co. 1932. pp. 467.

Essentials of Pediatric Nursing is excellent, both as a text-book for the under-graduate and as a reference for the graduate. It gives the essentials and details of pediatric nursing. Attention is paid to the ordinary routine care of the baby, that bothers the mother and that so few nurses can answer. The chapters on nutrition, the care

of the premature, and on infectious diseases are unusually thorough and stress the fundamentals that are essential to the proper understanding of the subject. Miss Perkins never forgets that pediatric nursing is entirely different from adult nursing and that she must understand and love children to succeed in her profession.

SUZANNE SCHAEFER, M. D.

Handbook for Senior Nurses and Midwives: By J. K. Watson, M. D. (Edin.), Capt. R. A. M. C. 2d ed. London, Oxford Univ. Press. 1931. pp. 676.

A very interesting and instructive volume for senior nurses and midwives. Dr. Watson covers a great deal of medical information in a surprisingly compact book. His chapter on pelvic measurements and difficulties of obstetrics are especially good.

JOHN F. DICKS, M. D.

PUBLICATIONS RECEIVED.

W. B. Saunders Company, Philadelphia: Minor Surgery, by Frederick Christopher, S. B., M. D., F. A. C. S. Preventive Medicine, by Mark F. Boyd, M. D. Medical Dictionary, by W. A. Newman Dorland, A. M., M. D., F. A. C. S., Sixteenth Edition. Physical Therapeutic Technic, by F. B. Granger, A. B., M. D. Clinical Endocrinology of the Female, by Charles Mazer, M. D., and Leopold Goldstein, M. D.

D. Appleton & Company, New York: The Curative Value of Light, by Edgar Mayer, M. D. Treatment of Syphilis, by J. F. Scamberg, A. B., M. D., and Carroll S. Wright, B. S., M. D.

J. B. Lippincott, Philadelphia: Orthopedics in Childhood, by William L. Sneed, M. D. Functional Disorders of the Gastrointestinal Tract, by William Gerry Morgan, M. D., F. A. C. P. Posture, by Frank D. Dickson, M. D.

The Macmillan Company, New York: Mental Deficiency Due to Birth Injuries, by Edgar A. Doll, Phd., Winthrop M. Phelps, M. D., Ruth Taylor Melcher, M. A. Nurses on Horseback, by Ernest Poole. Essentials of Pathology, by C. Russell Salisbury, M. D. The Sputum, Its Examination and Clinical Significance, by Randall Clifford, M. D.

Charles C. Thomas, Springfield: The Cardiac Output of Man in Health and Disease, by Arthur Grollman, Ph. D., M. D. Endocrine Medicine, by William Engelbach, M. D., Volumes I, II, and III.

Lea & Febiger, Philadelphia: A text-book of Pathology, by William Boyd, M. D.

Oxford University Press, New York: Handbook of the Vaccine Treatment of Chronic Rheumatic Diseases, by H. Warren Crowe, Second Edition.

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THE FUNCTIONS OF A COUNTY PUBLIC HEALTH DEPARTMENT LABORATORY.*

LEON S. LIPPINCOTT, M. D.

VICKSBURG, MISS.

It is now generally conceded that dependable and easily available laboratory service is necessary to the efficient practice of clinical or curative medicine. In the same way, dependable and easily available laboratory service is necessary to the efficient practice of preventive medicine which is the function of the county health department.

It is also generally conceded that there should not be and need not be any conflict between these two types of practice. Both are working for the health and happiness of our people. Actually, however, it is not always easy to understand exactly where the dividing line should be placed. By many it is considered that public health practice only has to do with communicable diseases. If all would agree upon this interpretation, it would be easier to adjust differences that arise.

In order to determine the functions of a county public health department laboratory, it is rather necessary to know just what the activities of a county public health department should embrace. That the question might be considered in the light of the opinions of those presumably best

qualified to judge, advice was sought from all of the health departments of the various states and possessions of the United States. In addition, from the same source was sought advice on some of the procedures usually carried out in laboratories of such departments. Acknowledgement is gratefully made for a large number of thoughtful replies, helpful suggestions and literature. Some, because of lack of experience with county health department laboratories, expressed no opinion. A few did not reply at all.

From a general study of the replies and literature received, I am first proud to say that, in the progress of public health, Mississippi is a leader. It is striking that in some states there is little or no differentiation of public health and charity. It has been said in Mississippi that a public health organization cannot make distinctions between non-indigent and indigent citizens. This is probably the correct attitude provided public health limits itself to the prevention of communicable diseases. Some states have found it necessary to make rules to prevent physicians from charging patients for laboratory examinations made free by the state. It is hardly conceivable that such a ruling should ever be necessary against a physician of Mississippi.

IN WHAT ACTIVITIES SHOULD A COUNTY PUBLIC HEALTH DEPARTMENT LABORATORY ENGAGE?

This question brought many interesting replies and mostly in accord that the laboratory activities should include all examinations for the diagnosis and control

*Read before the Section on Hygiene and Public Health at the Sixty-fifth Annual Session of the Mississippi State Medical Association, Jackson, April 12, 1932.

of all communicable diseases, including the carrier state, and the examination of public milk and water supplies; in other words, to problems affecting the general public as opposed to purely individual illness.

A few would do in addition urinalyses and blood counts for the indigent and make examinations for public institutions such as charity hospitals and sanitariums—again the mixing of public health and charity. One thinks the county health department laboratory should examine blood, sputum, urine, and feces for practicing physicians gratis or for a nominal charge; one that if the service is to be comprehensive, autogenous vaccines, tissues and research should be included. Such work would entail an expense that most of our county health departments could not afford. Such suggestions are in the minority.

A county health department laboratory would not go very far wrong if it limited its activities to the recommendations of the executive officer of our own State Board of Health, as follows:

"It is recommended that a public health department laboratory do: bacteriological water analyses; both chemical and bacteriological sewage analyses; bacteriological milk examinations; butter fat determinations; examinations of nose and throat specimens for diphtheria bacillus; feces examinations for intestinal parasites; bacteriological examinations of feces for pathogenic microorganisms; examinations of specimens taken from the urethral-vaginal tract for the purpose of discovering the gonococcus; examination of blood smears for malarial parasite."

I would add to this list nose and throat specimens for Vincent's angina, sputum for the tubercle bacillus, and nasopharyngeal specimens for meningococcus carriers. I shall discuss the Wassermann and similar tests later. If these tests are public health measures, they should be added to the list if the laboratory is properly equipped to perform them. Other public health examinations as for undulant fever, rabies, and tularemia, are probably best referred to a

central state laboratory for the reason that any one county would ordinarily have few calls for such examinations.

Finally, in practice, the number and variety of such examinations enumerated above would have to depend upon the funds available for the laboratory and its equipment. None of the work should be done unless it can be done accurately by properly trained and experienced technicians and no diagnoses should be made except by a physician.

THE ACTIVITIES SUCH A LABORATORY SHOULD
AVOID IN ORDER NOT TO CONFLICT WITH THE
PRIVATE PRACTICE OF MEDICINE

The answers to this question are in part covered by the answers to the previous question. A few statements are representative:

"The laboratory should not accept any work which does not pertain directly to the detection and control of communicable diseases."—Georgia.

"Physicians should not use the public health laboratory except in cases having a distinct public health significance and in cases that cannot be handled at private laboratories."—Indiana.

"The activities which a state public health laboratory should avoid are activities which are not helpful in the control of communicable diseases. . . ."—Virginia.

"The laboratory should not do blood chemistry, or similar tests; tissue work, white and red and differential blood counts. Possibly the laboratory should not do urinalyses except in the case of expectant mothers where such analyses could not be had otherwise; also, except for physicians from areas where there are no private laboratories."—Mississippi.

This last statement—"also, except for physicians from areas where there are no private laboratories," does not seem quite consistent with the idea of public health in Mississippi, that public health is for all alike. The ordinary urinalysis is not made to obtain information in regard to the diagnosis and control of communicable diseases. It is made to obtain information

in regard to an individual illness. Any physician, whether he is in an area where there are no private laboratories or not, should be able to make an ordinary urinalysis. If he cannot, it is hardly the function of the county to make up for his deficiencies. Is he more entitled to free service on private patients than the doctor in a city where there may be several private laboratories?

One reply received contained the following: "We have found it necessary, as a matter of policy, as well as protecting the health of the citizens, to occasionally make examinations that are quite foreign to ordinary public health work * * *."—Arizona. May it not be this "matter of policy" that causes most of the friction between public health and private practice?

A few abstracts from the reports of county health departments as published in the last biennial report of the Mississippi State Board of Health are pertinent. One county made 4,809 urinalyses. With the exception of blood for malaria, this was the greatest single item on the list of activities of the laboratory. One county includes, "diagnostic examinations are also made when requested by the physicians of the county." Another county states, "Although the clinical value of a laboratory, from the standpoint of public health is its place in making diagnoses of communicable disease, it has been a great aid to the physicians of the county in their treatment of other diseases." Another, "The laboratory has rendered very valuable service to the people of the county in assisting in early diagnosis of contagious diseases, in making examinations of milk and in doing a great part of the bacteriology work of the physicians of the county. The physicians are certainly appreciative of the service rendered and the work done by the laboratory is showing a gradual increase. Another, "Some of the activities" include 2,460 urinalyses, the largest single item listed and nearly three times as great as the next largest item,

feces for parasites, 877. It is hardly to be believed that a county health department should be maintained chiefly for the purpose of making urinalyses for physicians. Still another, "Most of the laboratory work is sent to the State Laboratory. However, the hookworm, urinalysis, and some malaria examinations are done in the local laboratory."

So far as I know, no county health department ever has sufficient funds to carry out the strictly public health work it would like to do. Laboratory examinations cost money—public money. Would it not be more to the point to expend the cost of urinalyses and such examinations having to do with clinical medicine on extending strictly public health work? Some of the money and time of laboratory workers could well be used in discovering the source of infection and in preventing further spread of bacillary dysentery. In 1929, 11,711 cases were reported; in 1930, 12,219. If there really are that many cases in Mississippi each year, something should be done to try to check it. For the biennial period of 1929-1930, the state hygienic laboratory made a total of 1,478 feces and urine cultures for *Bacillus typhosus* and *Bacillus dysenteriae* together, of which only 52 were positive. The report does not say how many showed dysentery bacilli. In spite of its reported prevalence, efforts at laboratory control are rarely or never mentioned in the county health department reports.

OF WHAT SHOULD THE LABORATORY EXAMINATION
OF FOOD HANDLERS, INCLUDING MILK
HANDLERS, CONSIST?

Most state public health men agree that examinations of food handlers should include examinations of feces and urine for the typhoid-paratyphoid-dysentery group. Some would include examinations of secretions from the nose and throat, especially for diphtheria and streptococci, and the Wassermann test for syphilis. Most would add other examinations as indicated by the history and physical examination, as

sputum for tubercle bacilli and specimens for gonococci. Maryland would examine dairy employees for undulant fever and has found a considerable incidence.

Single specimens are not enough for the determination of the intestinal infections and it is often difficult to secure satisfactory co-operation. Also examinations of food handlers, especially as regards the venereal diseases and nose and throat infections, are only of real value when conducted frequently. A person found free of such diseases today may not be so next week.

From Wisconsin—"The examination of food handlers should consist in my opinion of history and physical examination, bacteriological examination of stools and urine for typhoid, paratyphoid and dysentery, microscopic examination for intestinal parasites, nose and throat cultures for diphtheria carriers."

From Michigan—"The laboratory examination of food handlers should be limited to dealing with tubercular and intestinal infections. The venereal disease problem has been over-rated."

THE FREQUENCY OF MILK EXAMINATIONS FOR
FAIR GRADING

The grading of milk supplies serves both the public and the dairyman, and both are entitled to fair treatment at the hands of the laboratory. Examinations should be made by skilled and accurate workers. Mistakes may be a menace to the public or do injustice to the producer.

There is some difference of opinion as to the frequency of laboratory examinations of milk. Some think that once a month is fair if more frequent examinations are made when a supply is found to be decidedly low grade. Others think milk should be examined at least twice a month with additional examinations when indicated by the findings. North Dakota suggests that retail milk should be examined every week and a grading made once a month, feeling that "the greater the frequency of the collection and examination of the samples, the

better is the check that is maintained on the quality of the milk supply." Michigan replied, "At least twice a month for fair grading. Four samples a month from a source are none too many." The District of Columbia suggests twice weekly.

The standard milk ordinance of the United States Public Health Service requires not less than four samples of each dairyman's product during each grading period of three months. If these examinations are spread out at approximate intervals of three weeks and further examinations are made when the dairy inspection or laboratory findings indicate, a safe supervision will probably result.

THE FREQUENCY OF EXAMINATIONS FOR DETERMINING THE CONDITION OF WATER SUPPLIES AND
STANDARDS ACCEPTED AS SAFE

The necessary frequency of examinations of water supplies to guarantee public safety will vary with the source of the supply.

Arizona—"Municipal water samples should be examined daily, when possible, and at least three to five times a week when contamination is suspected. Rural school and quasi-public supplies should be examined monthly, or as frequently as local conditions will permit."

North Carolina—"Municipal water supplies should have a bacterial analysis once each day. Semi-public supplies should be examined at least once each month."

Wisconsin—"If the water supply is filtered and chlorinated it is important to examine this water hourly or daily, if possible. If it is a deep artesian well water supply, less frequent examinations are necessary."

Mississippi—"This depends almost entirely on the type of water supply in question and the plant personnel involved. In deep well supplies apparently properly protected, it is my opinion that the samples should be examined every two to four weeks, depending on local conditions and the result of physical surveys such as our engineers make; except at times of great climatological variations such as the

drought of 1930 and 1931, flood or overflow, or earthquake, etc. At such times many underground changes can and do take place which may make the supply unsafe. Such changes are often unseen and unknown, but if any danger has developed it will show up in the bacteriological examination. (Greenville, Mississippi, supply this year is a good example of such a case.) Under such conditions more frequent examinations should be made.

"In surface supplies where some form of water purification process is in use, frequent daily checks on all parts of the purification process should be made. These, in turn, should be reinforced by daily bacteriological examinations."

Most authorities agree with Georgia, that "laboratory examinations of water supplies should be supplemented by frequent visits to the various sources to appraise findings as to physical condition, equipment and class of operating personnel," and with the statement from Minnesota that "it is a dangerous practice to examine samples that have been collected by persons not qualified to obtain information on the location, construction, and operation of water supplies, which information * * * is necessary in correctly interpreting laboratory results."

The United States Treasury Department has furnished standards for safe drinking water for interstate carriers which are generally accepted. The average bacterial count shall not exceed 100 per c.c.; and *B. coli* shall not be confirmed in more than 10 per cent of all portions of 10 c.c. each of all samples examined at any one time, not less than five 10 c.c. portions of each sample to be examined.

THE FREQUENCY OF EXAMINATIONS FOR DETERMINING THE CONDITION OF PUBLIC SWIMMING POOLS AND STANDARDS ACCEPTED AS SAFE

It is my impression that we in Mississippi have not given as much attention to the quality of the water of our swimming pools as has been done in most other states. Many people apparently have the idea that

because there is wet water it is perfectly fine for swimming.

Within two years a banker took a trip down the river and at an inviting spot, decided to swim. He was enjoying himself when he noticed floating paper and discovered it was from the sewer above. Because the water was flowing and he was out of sight of the city, he thought he was safe. I once attended a bathing beauty contest held at a cow pool that collected its water from the surrounding farm land. It was muddy and dirty but it was wet and a pool. Fortunately as with most such contests, there was little real swimming. Fortunately, too, for those who did go in the water, there was no typhoid fever on that particular farm.

The examination of swimming pool water should be made "weekly,"—Kentucky; "one each day,"—North Carolina; "daily,"—Oklahoma; "once a week,"—District of Columbia; "weekly, perhaps more often when carrying peak loads,"—Pennsylvania; "twice a week, three samples each time, near inlet, center, near outlet,"—Canal Zone; "urge daily analyses,"—Illinois; "at least once a week,"—Louisiana.

Most states insist on proper chlorination and standards the same as for drinking water. Most people have learned to be particular in regard to drinking water. We should make our people realize that it is impossible to swim without getting water in the mouth and nose, which amounts to drinking the water.

From Mississippi—"proper purification processes should be provided and frequent daily residual chlorine tests made to maintain about 0.5 p.p.m. residual. This should be reinforced by daily bacteriological examinations Standards the same as for drinking water"

ARE THE WASSERMANN AND SIMILAR TESTS PUBLIC HEALTH MEASURES?

Wassermann and similar tests are so generally made at public expense by public health laboratories that I was surprised to see some of the opinions expressed by health

officers and others in answer to this question. True many of them stated without question that they consider these tests public health measures, but

"The Wassermann and similar tests are public health measures in the case of food handlers, indigents, and public charges."—Arizona.

"Not all Wassermann tests are public health measures."—Indiana.

"The hygienic laboratories run all Wassermans for the indigent cases of the state as a matter of aid to the physician and to the indigent patient. I personally have doubted the advisability of running routine Wassermans on food handlers except when needed to clear up a diagnosis."—Arkansas.

"Questionable; should be limited to indigent cases."—Oklahoma.

"This department makes Wassermann and similar tests when requested although we do not look upon it as a general public health measure."—Louisiana.

"The serum diagnosis of syphilis is certainly a public health diagnostic aid. There is, however, some question in my mind as to the number of repeats on a patient under treatment that a laboratory should do."—Michigan.

"While community protection does not, perhaps, often enter into requests for Wassermann and similar tests, these do with sufficient frequency assume the status of public health measures in that they tend to establish the diagnosis of a transmissible condition which at times requires the attention of the health officer for the protection of others."—Pennsylvania.

I think we can probably agree that syphilis is a communicable disease and as such is a public health problem. I think we can also probably agree that the performing of Wassermann tests for physicians as a part of all routine examinations of patients in private practice at least cause an expenditure of public funds which could well be used for work of more general value to the public.

CONCLUSIONS

The activities of a County Public Health Department laboratory should include all examinations for the diagnosis and control of communicable disease.

Such a laboratory should avoid activities that have to do with the diagnosis and treatment of purely individual illnesses. The ordinary chemical and microscopical urinalysis, except possibly for expectant mothers, does not have to do with public health and should not be made at public expense.

There is always a definite need for funds over and above the amounts available for public health work. Money appropriated for public health work should not be expended for aid in individual, non-communicable diseases.

The laboratory examinations of food handlers should routinely include examinations of feces and urine for typhoid and paratyphoid, feces for dysentery, nose and throat specimens, and such other specimens as would confirm a suspicion of other communicable disease.

Milk examinations should be made four times in each grading period of three months, and more frequently when dairy inspections or laboratory findings show a low grade.

Surface water supplies should be examined daily and more frequently when contamination is found or suspected.

Deep well water supplies should be examined about every two weeks, depending upon conditions found by the sanitary engineer.

The standards of the United States Treasury Department for drinking water for interstate carriers are safe to follow.

Swimming pool water should be examined as frequently as surface drinking water supplies and the same standards should be applied.

The Wassermann and similar tests can be considered as having to do with a communicable disease and as such have a place in the activities of a county public health laboratory. While the routine Wassermann test as a part of the physical examination

in private practice is desirable, there is some doubt as to the advisability and desirability of a public health department assuming the expense for the individual.

Finally, there should be no grounds for contention between public health and private practice. In a great profession, harmony and co-operation are only a question of fair play and the golden rule.

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DISCUSSION

Dr. E. F. Howard (Vicksburg): Since we have so few county laboratories in Mississippi, the State Board laboratory in Jackson may be considered in the light of a county laboratory insofar

as it functions for those counties that do not maintain them, or have the work of their own laboratories supplemented in Jackson. Therefore, a discussion of this subject may be said, in a measure, to include all work of this sort done in the State.

I agree with the doctor fully in his statement that if the laboratories follow the recommendations of Dr. Underwood they will not go far wrong, and it is essential that they should if we accept the dictum of Dr. Kemmerer that "whatever service the laboratory renders to one citizen of the state it is under obligation to render to any other individual who requests it, regardless of his ability to pay for the service." This ruling, with which I think most of us agree, makes it vitally necessary that public health activities be limited strictly to public health affairs.

The first problem of all public health work is to get the money to finance it. No one who has followed the advance of this work in Mississippi in the past twenty years will fail to admit that it could always have used, to great advantage, more money than it had at its disposal. As with church and charity organizations, there is always more work to be done than available funds will permit; and since there is, and always will be, such a shortage the laboratory should limit its activities to its legitimate work for which it would then have at its disposal facilities that it would otherwise squander on work outside its proper sphere.

The reports of our various county departments are not always explicit as to the character and amount of laboratory work done, but one gathers from them three items that apparently fall under this head.

There is more than a suspicion excited that the majority of county establishments serve as diagnostic laboratories for the physicians of their respective communities. This is all wrong. There is no possible defense for such a course, unless the information requested bears solely on the control of communicable disease.

The Board's last report shows more than 44,000 urinalyses done in the state and county laboratories in the past two years. Except in the case of pregnant women, by no stretch of the imagination can urinalysis be classed as public health work, so in this item alone we are spending many state and county dollars in a way that we can not well defend.

The Jackson laboratory and the laboratories in Bolivar and Lauderdale report a total of 120,000 Klines and Wassermanns. Such examinations are not often made in early syphilis, and tertiary syphilis is rarely a communicable disease. Transmissible, yes, but comparatively few of the examinations are made in the interest of children as yet unborn, and fewer still of those not yet begotten.

It is impossible to estimate the cost of these items, for the work of the state laboratory is too vast for details to be calculated accurately and the county departments, with one exception—Warren—are modestly silent as to the cost of anything, but the thought will not dawn that if these items alone were curtailed within their proper limits a material amount of time and money would be diverted into proper channels to the great benefit of legitimate public health work.

Dr. E. T. White (Greenville): I appreciated Dr. Lippincott's paper very much, and as I have not been in the public health work I am surprised to hear some of the reports that he states, especially in regard to the public health laboratories doing so many urinalyses and Wassermanns for routine examinations rather than for the detection of communicable diseases. I know some doctors who send Wassermann tests to the State Board Laboratory on all of their patients. This takes up lots of time and is an expense to the state that could be used in other work on detection and controlling the spread of communicable diseases.

I would like to emphasize what Dr. Lippincott said about the examination of feces on food handlers, and especially for amoeba. There is to be a paper tomorrow on the increase in amoebic dysentery in Mississippi in the past ten years. We are seeing much more amoebic dysentery now than we saw ten years ago. If the public health laboratories could have more of these examinations the control of the spread of amoebic dysentery may be helped.

Again I want to thank Dr. Lippincott for the things he has brought out in his paper, and if it will help to get the public health laboratories to doing the type of work that he specifies and not so many routine laboratory tests, I am sure there will be a big improvement in the control of communicable diseases.

Dr. H. C. Ricks (Jackson): I am interested in the statement made by some that these Wassermann examinations of the blood are not always in the interest of public health. That is true. They may not be.

I was also interested to note that some men doubt the value of blood Wassermanns in connection with the examination of food handlers. Personally, I doubt very seriously the public health value of making a blood Wassermann on food handlers if that is the only reason for making a blood Wassermann. As far as the general public is concerned, so long as the food handler limits his or her activities to handling food, there is no danger. It may be that tertiary syphilis is not communicable. I do not believe we have any one who is able to tell us just when syphilis reaches the stage that it is not communicable under certain conditions. Therefore, I say this, that the public health laboratory should do the

Wassermann test on the request of any physician who makes the request. I think that any examination should be made by the public health laboratory or any other laboratory for that matter at the request of a physician only. A layman knows nothing about a laboratory report, and as a director of laboratories, I have had people come to me with a pocket full of reports from private laboratories that they have paid \$5.00 for. They want you to take a blood specimen and make an examination, and then turn the report over to them. If your report is negative, they declare the one that was positive is wrong and your report is correct and if your report is positive, they declare the other one is correct if it is negative because they all want a negative report. I do not think that any examination should be made except on the request of the county health officer or a practicing physician. I do not think that the private laboratories in Mississippi have anything to fear from Dr. Kemmerer. I think that Dr. Kemmerer is interested in promoting laboratory work. He would like to see these urinalyses done by local physicians or private practitioners. Unfortunately, to my certain knowledge, many men have brought specimens of urine to Dr. Kemmerer for examinations, and they say to him, "If you don't do it, it won't be done. I don't have time to do it, and this patient is not able to pay for it; therefore, if it is not done by you, it won't be done." I know from my own experience that the public health laboratory is a great asset to the private laboratory. Some men who are operating private laboratories say that by promoting laboratory work by the State Board of Health, they are promoting their work because the people will use private laboratories to check results.

Dr. W. S. Leathers (Nashville): I was very much pleased with Dr. Lippincott's paper. It seemed to me that he covered the subject with a remarkable degree of care, and the purpose in presenting a paper of this kind was that we might get a fair idea of the problem. There is no disposition on your part, as far as I can see, other than to present facts that were obtainable. Now, I do not care to enter into any discussion except to say that I believe that there is no reason why a public health laboratory should do urinalyses. It seems to me that isn't fundamentally their province. Of course we had this thing in our state, and it was put to the vote of the doctors in different parts of the state—it was immaterial so far as the state health department was concerned—and these doctors threw the responsibility on us; they said they wanted it. Now it seems to me that the laboratory could very well be protected against this by the men in the profession. If you people think it is wrong then why don't you take the position as a profession that these laboratories should not do this work? If you

do that as a profession the laboratories won't do it. It is in your hands, and, therefore, it seems to me that there should not be any particular criticism so far as the laboratory is concerned.

I was rather interested in the remark that Dr. Ricks made concerning the doctor who brought these specimens of urine to the laboratory. It seems to me that if a doctor frankly admits he can not do a urinalysis—that he must have help—he has got his hands out, saying "I must have help." Of course fundamentally he has no right to make that statement to a laboratory, because he should know how to make an urinalysis, and it is a thing that seems to me that does not admit of certain tests. These urinalyses should be made by a physician, so I do not think that there is any row between the public health department and the doctor in regard to the urinalyses, because the public health people are perfectly willing to have the modern profession assume the responsibility as I understand it. Of course I am not speaking officially for the state health department, but I do know, and I am speaking from my own viewpoint. Now in regard to the Wassermann I do not know, this is a pretty serious question, and if we say it is a communicable disease. Now personally, I believe that as far as possible we ought to encourage people to take specimens to the private laboratory. As a profession, if you have a patient who pays for the examination of a specimen, and you have a laboratory nearby you ought to educate your patient to take those specimens to the private laboratory, so that the public health laboratory can do work that is more important. That is about the way I see it, based on this presentment. I think Dr. Howard's statement was fair except on the point that I cannot very well agree on the question of differentiating between what part of syphilis is communicable and what part isn't.

Dr. N. C. Womack, Jackson: I want to apologize to Dr. Lippincott for not staying through his paper, and I want to come to the rescue of my friend, Dr. Kemmerer. We use Dr. Kemmerer's laboratory as much as any other doctor in this section. There is so much work of an investigative and scientific nature that the average laboratory may not do on account of time and expense, which the state laboratory, through its director, will do. There are many laboratory tests which are within the scope of preventive medicine that are done without cost to the patient which in many instances would not be done on account of the expense. As for routine examinations of urine I am sure the director of the State Laboratory would like to be relieved of this work. While it is strictly not a matter of preventive medicine, it is done more for expediency's sake than otherwise.

Dr. F. Michael Smith, Vicksburg: Permit your chairman to state that this paper as presented conforms strictly to the subject of the paper which was "The Functions of a County Health Department Laboratory." Now I am impressed that we should confine our discussions to that subject. Some mention or discussion has been made as to the nature of the specimens and the work that should be done in a county health department's laboratory. I wish to suggest that if you have a county health department laboratory that all specimens submitted for examination should be submitted by the county health officer or else submitted through the county health officer; that it is not proper for a county health department to receive specimens direct from a practicing physician doing curative medicine. And I wish further to add that you ought to have a man as health officer who is capable and competent of differentiating what are public health problems and public health specimens and who would submit to that laboratory only those specimens whereon a report would have to do with public health problems. We ask your indulgence for these rather seemingly didactic statements and will now ask Dr. Lippincott to close this discussion.

Dr. Lippincott, closing: I just want to say first that I am sorry that Dr. Ricks brought the private laboratory into this discussion. True, I have something to do with a private laboratory, but in this paper I tried to avoid the private laboratory point of view. I think you will agree that the paper is written from a public health standpoint.

Dr. Smith is the head of the health department of our county and while I am not wholly a public health laboratory worker, I am a sort of a semi-public health man because I do the county public health laboratory work for Dr. Smith six months out of the year. As such I do know something of the service he thinks a public health laboratory should render and I assure you he is following very closely the conclusions suggested by this paper.

As a private laboratory worker, I have no fight with the state laboratory or with Dr. Kemmerer, or with anyone else. I know very well that Dr. Kemmerer does not want to do urinalysis at public expense. I know Dr. Stingily before him did not want to do them. I know they have been forced to do them. The one reason I mentioned urinalyses was because there are so many made. From a public health standpoint I know there are more pressing problems for which the money expended could be more profitably used. There is one county public health laboratory in this state which in the past two years, according to its own report, has made nearly three times as many urinalyses as any other item of its ac-

tivities. I do not believe that the taxpayer's money should be used to set up free urinalysis laboratories for doctors of this state. I do not believe and the public health workers of other states apparently do not believe that that is public health.

As for syphilis, I very carefully said that it was the opinion of the majority that it is a communicable disease, and as such certain tests should be made to aid in its control. But I believe, and many of those who expressed an opinion believe, that at least a part of the state money spent to do Wassermann tests promiscuously as a routine for private practitioners could be more profitably used for other more pressing phases of public health work.

Dr. Womack thinks a Wassermann test should be performed on every patient and I agree with him. But I doubt very much if it is the function of the state or county to make such routine Wassermann tests for Dr. Womack's private hospital or for private patients generally.

I have tried to take no dogmatic attitude. I have tried to give you the suggestions that I have received from all over the country. I thank you all very much for the discussion.

THE CONTROL OF FILTH BORNE DISEASES IN MISSISSIPPI, HOW AND WHEN.*

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The subject assigned to me for discussion at this time is a most flexible one. It should be a very easy subject for any essayist. You ask why? The answer is that no part of the subject is in any respect specific. The term "Filth Borne Diseases" may have most any meaning we please to designate. The usual conception is, however, that filth borne diseases are diseases of intestinal origin as the dysenteries, typhoid fever, hookworm disease, etc. For the purpose of discussion at this time the term as used in this paper shall be given a much broader meaning as follows: "A filth borne disease may be any disease of man, the spread of which is dependent upon, accelerated, or in any way made possible by the direct or indirect interming-

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ling or association of human beings, of other animals, or of material objects with themselves, or with each other."

The word "control," likewise, may, among health officials, have as many interpretations as there are individuals who use it. In this paper the word shall be interpreted to mean the total elimination of any disease the elimination of which is possible and the reduction to the lowest possible minimum of the case incidence and death rates of all of the other diseases concerned.

The remaining part of this subject, namely, how and when control of filth borne disease in Mississippi shall be accomplished, might be answered accurately only by our Heavenly Father. There are, however, certain fundamental facts now known to human health authorities, that if observed may enable man, in a most astonishingly accurate manner, to closely approximate the goal.

No individual, no group or groups of individuals, can be charged with responsibility for the proper care of the health of any community. Every individual in the community, regardless of sect, social standing, or apparent degree of ability to serve, has a definite part of this responsibility thrust upon him. Those most capable are those most interested. The specially trained should outline and direct the execution of the program in such a manner that the interest and ability of each individual, or group of individuals, will be utilized in that capacity wherein each can best serve the purpose of the whole program. This part of the responsibility should rest with the health department.

NECESSARY LEGISLATION

The law most capable of enforcement is not that written in the statute; it is the law inscribed in the minds and hearts of those governed. Such "legal authority" is best obtained through the channel of constructive education. There are, however, certain essential laws that may be classed under three general heads, namely:

(1) Laws authorizing the appropriation of sufficient public funds for, and au-

thorizing the establishment of a full-time county health department with sufficient personnel effectively to carry on an adequate program.

(2) Legal authority granting the health department ample freedom from entanglement in the execution of a reasonable health program.

(3) Local ordinances governing the construction, operation and maintenance of special or specific projects. Examples here would be relative to a public water supply, a sewage disposal system, immunizations during the pre-school and school period, and a safe public milk supply.

EDUCATIONAL PROGRAM

A widespread, and at time appalling, ignorance exists among the general public as to the ways and means of controlling filth borne diseases. In its campaign for the prevention of disease and the promotion of physical fitness, the health department must depend chiefly upon educational methods for the carrying out of its program. The present day health worker very rarely resorts to law enforcement for obtaining desired results. Persuasion and education are many times more effective.

The sum total of all educational activity of a full-time county health department should result in a full cooperative, popular understanding; that is, a public sentiment endorsing the activities of the health department in relatively the same manner as that given the department of public education. To expect or realize such a public sentiment the first and most important consideration is that of the personnel contained in the department of health. No one would question the truth of the statement that highly trained, qualified men and women are a necessity in the realization of present day demands for the education of the youth in the public schools of our land. These teachers determine the future intellectual status of our population and thus indirectly the economic status of our county. All that is essential for the teacher in the public school, and then some more, is essential for the worker who is

directing the health educational activities of our country. All members of the local health department should be specially trained in the fundamental principles and problems of public health. In probably no other profession is the personality of the workers more vividly reflected in the type of results obtained through their endeavor. The magnetic personality, eager, and with the ability literally to saturate the public with the essential fundamentals of his or her work and at the same time hold the interest of the public to a keen, eager edge, is the ideal to be sought in making a selection of the health department personnel.

The one fundamental principle that should be emphasized by every public health worker can be summed up in the definition of sanitation offered by our distinguished friend, Dr. L. L. Lumsden of the United States Public Health Service, in U. S. P. H. S. bulletin No. 45, Vol. 34. This definition states that "Sanitation is the common-sense application of the principle of cleanliness." More elaborate and more scientific definitions have been submitted by various authors, but none more workable and more simple than that of Dr. Lumsden is available. I should like to slightly elaborate this splendid definition in order to impress upon health workers the scope of its application. Sanitation is the common-sense application of the principles of cleanliness by the individual, both as an individual and as a member of society.

The following measures will aid in educating the community in methods of controlling filth borne diseases.

1. The Medical Profession.

Preventive medicine had its origin in the medical profession. Such immortal men as John Snow, Koch, Pasteur and Budd laid the foundation of the modern conception of preventive medicine. There is no difference today in the relationship of preventive medicine and the general medical profession. Every practitioner of medicine today is also a practitioner of preventive medicine. Health authorities and all health workers appreciate today the sovereignty

of the family physician in the promotion and the practical application of health education.

The physician's influence in the home and the confidence placed in him by every member of the family, has never been and never will be replaced or equalled by any other individual, or groups of individuals. His opportunity to educate the general public as to the ways and means of controlling filth borne diseases is unsurpassed by any other influence. Every health officer in Mississippi should gain and hold the confidence and friendship of every member of his local medical profession to the extent that he can influence each member to practice preventive medicine in the same fashion he himself does.

Each family physician should instruct the family in which a case of communicable disease exists as to every detail of the rules and regulations of the state board of health governing that particular disease. He should not only isolate the sick patient but should instruct each non-immune contact as to the isolation period necessary for him to observe. If the medical profession is not doing this, earnestly and carefully, it is to a very large extent because the local health officer has failed to gain the confidence and whole hearted cooperation of the medical profession. Each health officer should see to it that every physician in his county has in his possession a copy of the state board of health "Rules and Regulations Governing Communicable Diseases."

It is my humble opinion that in Mississippi too many parents are sending their children to school after children have been exposed to contagious diseases and before the period of isolation for contacts has expired. Even should the health officer make the attempt, it would be impossible for him, or any member of the health department staff, to visit all cases of communicable disease and institute all quarantine measures as outlined by the "Rules and Regulations Governing Communicable Diseases." It is, therefore, necessary that

every physician cooperate in the enforcement of these rules and regulations. Parents appreciate this information coming from their family physician more so than from the health officer. In by far the great majority of the cases, this advice on the part of the family physician is all that is necessary to effect accurate compliance. In the few cases where other measures are necessary it is then the duty of the county health officer to secure proper compliance with the law.

2. The Press.

Probably the most influential factor in the affairs of any community is the local press. With modern methods of transportation and the resulting geographical expansion of the individual's activities, there has resulted also a corresponding geographical expansion of the individual's interests. Public educational facilities, during the past two or three decades, have increased in number and efficiency in remarkable fashion. This has resulted in a marked degree of expansion of the individual's intellectual interests. The rural districts in the United States have not lagged in this advancement. The rural inhabitant is no longer isolated either geographically or intellectually. He is reading the daily and weekly papers with equal eagerness and interest to that of the urban dweller.

The full, sympathetic cooperation of the local press is not only advisable, but is essential to the successful execution of a rural health program. Practically all editors in rural districts are usually very anxious to cooperate in any activity that has for its purpose the betterment of community health conditions. Frequent interesting articles relative to disease control should be submitted in complete form ready for publication. A complete outline of any special program should be published, followed later with any results obtained. The results of any program should always be published.

3. The School.

First, obtain full cooperation of the superintendent of education and each teacher

to the extent that they demonstrate their interest by active, enthusiastic participation in the program. Timely lectures should be given by the health officer, nurses and sanitarian to the parent-teacher associations, the school children and the general public.

Health education is the sum of experience in school and elsewhere, which favorably influences habits, attitudes and knowledge, relating to individual, community, and racial health.

Conscious provision should be made for health education each year, each month, each week, and each day in the school life of the child in kindergarten, elementary school, junior high school, senior high school, in the teacher training institution, and in college.

Health education in the elementary school must be provided, as a rule, by the grade teacher. It is desirable that health education should be attended to wherever favorable opportunity comes for application of any idea or principle relating to health. To insure satisfactory health instruction in the elementary school, every grade teacher should receive adequate instruction and training for her part of the health work, as a student in the teacher training institution. Efficient supervision must be provided for the guidance of every grade teacher in the work done in health education.

Efforts of the school in health education will be largely futile unless satisfactory cooperation is provided by the home, and by the community outside of the life of the child in school.

4. Organization of the Laity.

In every community there are certain leading individuals who are definite factors in the moulding of public sentiment. It may be the sheriff, one or all of the county supervisors, county judge, county attorney, the mayor, city councilmen and the justice of the peace or constable. Usually the ministers of the Gospel, physicians, and superintendents of education are very influential individuals. Successful planters and other business men may be the leaders. With the

negro population in Mississippi the planter (landlord) and the colored parson are the two leading men through which the race can be converted into action. Often the trustees of the negro schools are very influential among their people.

It should be determined who these leaders are, both white and black, and special concerted effort should be made to give them a clear, full understanding of the purpose and plan of the program. If this portion of the population of a community is first convinced that such a program is favorable, and if their interest is aroused to such an extent that they themselves will actively participate in it, the cause is won.

Auxiliary organizations are of inestimable value to the health worker in the promotion of an educational program. Probably without exception they are always exceedingly interested in the work and eager to take an active part in disseminating the good story throughout the community. Good newspaper publicity for the programs can be obtained through such organizations. A list of such organizations, with the names and addresses of the leaders of each, should be on file in every health department.

HEALTH SURVEY

The health survey is such a practical procedure and by which such far reaching educational results are possible, that it is deemed wise to emphasize it in this paper. The U. S. Public Health Service has established the fact that the health survey of rural districts is the first essential in starting a health program. If at all possible, very early in the program a house to house canvass should be made. If special personnel is necessary to accomplish this, such money is economically spent.

The investigator, after making himself known at the home, and after receiving an expression of willingness for him to do so, proceeds to make the canvass and survey. A uniform printed card is filled out at each home and careful effort is made to obtain fully and accurately all data called for on the card. He is usually accompanied about the premises by some responsible

member of the household, and during the survey this member's interest in the principles of sanitation as applying to his home, is aroused. Good conditions found are commended and methods for keeping them good described. Faulty conditions are pointed out, their danger explained, and simple, feasible, common-sense measures for correcting them described.

Adequate follow-up work is most essential to the success of the health survey. The investigator should be a well qualified, energetic sanitary inspector. The inspector's qualification for the work he is doing is directly reflected in the number of sanitary corrections he obtains. His magnetic personality, eager and with the ability to literally saturate the individual with the gospel of filth borne disease prevention, should excel the influence that has in the past literally saturated the individual's environment with the excreta from filth borne disease. To have this ability the inspector must himself first be sold. Then he must have the energy to demonstrate his product by actual building.

It is also necessary that the sanitary inspector be given absolute cooperation from the health officer first, and through him the absolute support of the leaders and fathers of the community. Without this he will fail.

Let me emphasize in closing this paper that one of the main goals to be attained by an intensive campaign for health protection is to create within the minds of the people an appreciation that money intelligently spent for the prevention of disease is money saved from loss in diminished earning and in the care and treatment of the indigent sick. More so in rural districts than in urban, it is necessary that the individual spend his personal money for the creation of sanitary conditions about his own premises. The only method available for the attainment of the most far-reaching results in health work is through education. The most practical, most efficient and economic means of conducting such educational procedure is through the

services of a full-time county health department. When the whole rural population of Mississippi is taught the fundamental principles of public health work through the intelligent efforts of such a department, then the health of rural people in Mississippi will be on a par with that in urban districts, not only in Mississippi, but in any section of the country. Then, and not until then, can we say there exists the control of filth borne diseases in Mississippi.

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DISCUSSION

Dr. C. C. Applewhite, Jackson: In the first place I want to congratulate Dr. Haney upon his paper. It is well written and embraces practically all of the fundamental factors involved in the prevention of these diseases.

For more than the past quarter of a century the medical profession has had in its possession the knowledge of all of those factors which have a bearing upon the mode of transmission and the methods of prevention of the filth borne diseases, and for more than two decades the Mississippi State Board of Health has waged a rather relentless campaign against these diseases. Notwithstanding this fact, last year more than 100,000 people in this state suffered from one of the so-called filth borne diseases. Now the question naturally arises, according to the title of this paper, when and how are we going to control these diseases?

It is rather difficult to say just exactly when this is going to occur. In looking over the population of Mississippi, knowing something about

the present state of sanitation, I figure that there are about 250,000 homes, nearly a quarter of a million, in the state of Mississippi which are not properly sanitized, and at the present rate of improving the methods of excreta disposal which we have been maintaining for the past four years, I figure that if we keep up that rate and continue the maintenance, it will probably be at least two decades before we can get this state in a fairly good state of sanitation. In other words, it will require about twenty more years of hard work.

Now the question of how to accomplish this presents itself. We know what the causes of these diseases are. Dr. Haney has placed a more liberal interpretation upon this term—filth borne diseases—than I have. I want to state that the control of the real filth borne diseases—the excreta borne diseases—is a problem peculiar to the small towns and thickly populated rural districts. It is in these areas where proper disposal of human excreta is most urgently needed at present.

There are just two measures which must be invoked to achieve worthwhile results. The first is public health education. We must teach the people in a practical way the sources and modes of infection of these diseases. They must be taught that there is only one type of filth that is responsible for the continuation of these diseases; namely, the discharges from the bowels and kidneys of human beings. Only when the people realize that this is the only source of these diseases and they must get some of this material into their mouths in a fresh state in order to catch one of these diseases can we reasonably expect to reach a solution of this problem. It is the duty and function of the various health departments and all of those who know these facts to warn the people about the dangers of this continuous exposure to this potentially dangerous matter.

There may be some controversy concerning the real merits of sanitation and vaccination as control measures. There is only one of the filth borne diseases for which we have at present an effective immunizing agent. I sometime wonder, however, if we have not overdone vaccinations to the neglect of sanitation. I also wonder if vaccination against typhoid fever has not retarded sanitation to a certain point. Vaccination sometimes gives the people a feeling of security against the filth borne diseases which is not warranted when this process is resorted to and sanitation is neglected. There is a very striking example of the effect of vaccination on the incidence of typhoid fever in Lee County. In that county the typhoid rate has been persistently held down by means of vaccination while the

dysentery rate is about as high as in any county in the state. This high dysentery rate indicates a neglect in sanitation. If all the filth borne diseases are to be controlled, greater dependence must be placed on sanitation.

In the little town of New Albany, Mississippi, in 1928 there occurred some 78 cases of ileocolitis. The health department got busy. They did two things; first, they sanitized the homes with respect to excreta disposal, and second, they enforced the provisions of the Standard Milk Ordinance thus insuring a satisfactory public milk supply. In 1930 not one case of ileocolitis was reported in the town. What sanitation did for New Albany can be accomplished in most any other town or community of the state. If the health officer, the sanitary inspector, and the public health nurse will duly stress and explain to the people the danger occasioned by the promiscuous scatteration of human excreta and get the people of Mississippi conscious of this danger and cause them to realize that sanitation is a disease preventing and life saving agency, the incidence of the filth borne diseases will be markedly reduced. Until this is accomplished this state will continue to have numerous cases of filth borne diseases which will result in needless sacrifice of human life.

Dr. L. S. Lippincott, Vicksburg: I do not want to be accused of talking from the private laboratory standpoint, but I would like to make a suggestion. I have already made some mention of it. In 1930 there were reported to the State Board of Health more than 12,000 cases of bacillary dysentery. That is a filth borne disease. I do not believe there were 12,000 cases in this state. I am looking for it all the time. I occasionally see amebic dysentery. I see diarrhea—I won't say I see dysentery—often, and I am wondering if we could not accomplish something by checking a little more closely these diagnoses of bacillary dysentery. It does not look well to the outside world to see 12,000 cases here, if they are not here, and I do not believe they are here. If I was going to bring a factory or a mill or any other organization (which employs a large number of men) into Mississippi, I would not do it if I saw a report of a large incidence of bacillary dysentery in this state. We are injuring this state by these reports, just the same as we are injuring it by our malaria reports that are not checked, and there is a good chance for the State Board of Health to insist that these cases be checked. I understand the doctor objects to your doubting his diagnosis, but you are doing it with malaria—you are asking him to please have it checked, and you can do it in a nice way with bacillary dysentery, and I am willing to believe if you will check these cases by laboratory examinations

you will find that bacillary dysentery reports drop to almost nothing.

Dr. Williams, Gulfport: It is exceedingly interesting to hear referred to an extinct class of doctors—the family physician. There is almost no such animal. It is refreshing to hear reference to the shortcoming of the medical colleges in their training of these men. It is amusing to watch the trend of discussions and see how the directors of certain bureaus advocate building the old out-door family privy—and then watch how quickly the laboratory men rally to their standard bearer when he refers to the necessity of his class of work. We might follow it a little bit further and take up the statistician who knows little about sanitation, but talks very wisely and tells the hard worked fellow just how and what to do. What we need in all of this work is more time spent on communicable diseases and control of same, although the family physician knows how they are communicated from individual to individual, enough stress isn't placed upon it, and the responsibility of the attending physician hasn't been emphasized enough to make him assume the part that he should play in the prevention of diseases.

It is interesting to watch the workings of the Bureau of Communicable Diseases and these enthusiastic fellows that want to do everything with a hypodermic syringe. The truth of the business is you have to do some of these all of the time and you can do all of these some of the time. It is interesting to hear referred to, those fellows that are beginning to read the papers. Down our way, I think they average just about what they do in the average communities—but a large percentage of the people do not read newspapers and those who do, don't read very much about sanitation and public health, particularly if these articles are not written with a great deal of judgment and discretion. Long articles are absolutely ignored and short articles have to be so placed and handled in your newspapers and by your public press as to reach those people whom they are intended to benefit. After all, you have to have a well balanced program and work that part of your program that is most acceptable to the people with whom you are working.

Dr. F. Michael Smith (Vicksburg): I wish to indorse what the last speaker, Dr. Williams, has said. You can't depend absolutely or directly on any one of the preventive measures in communicable or filth borne disease control. It takes education, vaccination and sanitation, all of these. Let us remember this fact, that immunity is not an absolute or a fixed thing. It is not everlasting, whether acquired by a successful fight against a communicable disease or by cell activity when

stimulated by vaccines to produce specific antibodies. There are cases known to have had smallpox the second time. Three shots of typhoid serum may protect some people one or two years, others three years, who are subjected to only ordinary ingestion or body invasion of typhoid bacilli, but should they get a mass dose of extra virulent typhoid bacilli three shots oftentimes does not protect.

At the opening of this section I reminded you that this association had waited 64 years before they saw fit to pay me the honor of making me chairman of this section, and I reminded you that I endeavored to show my appreciation by not bringing you a "cut and dried" chairman's address, but I do want to be indulged to these few parting words that will pertain to the question of education that has been stressed in this most excellent paper.

A great deal has been said about the family physician, the responsibility and duty in the education of the family in matters that pertained to health and longevity. This is unquestionably true, that is, true in part, that he can perform no greater service than the service of an educator. I am persuaded that the family physician should not only be conversant with the pathology, rational medical and surgical treatment and dietetics that have to do with his patient and the particular disease from which he suffers, but I am further persuaded that he should be conversant with filth borne diseases, in fact all other communicable diseases not alone as relates to the causative agent, the source of infection and mode of transmission, period of incubation and period of communicability, but in methods of control we would not have him ignorant of same but cautious in advising relative to same. He should remember that finally and legally the responsibility for the control of communicable disease rests upon the health officer, that he (the health officer) is required to institute isolation and the quarantine of contacts, and to release such when the period of communicability is past. Therefore, I urge that no health officer should make any suggestions or criticisms on the curative treatment and management of the case and respectfully suggest that no practitioner should embarrass any health officer, who is trying to fulfill the legal requirements and institute a sane program that makes for the protection of the public, by telling his patient he can go out on such and such a date, advise all contacts when they can enter on the performance of their duty. I have been embarrassed a number of times by people telling me their doctor said they could do so and so which was not in conformity with good preventive medicine practices or in keeping with the rules and regulations of the state departments of health. Just a few days ago a man

with smallpox, or rather his child had it, told me his doctor said he could go back to work the next day in view of the fact that the man had an old scar he had had since childhood. I knew that doctor to be a good man, but I told this man to report for revaccination and I would have a talk with the doctor and I would then advise him further. I have had physicians to advise contacts with scarlet fever and diphtheria what course to pursue and oftentimes same was not in keeping with good and authentic preventive measures or in conformity to state regulations.

So in our educational program let's clearly visualize the duties and responsibilities of the general practitioner, and the duties and responsibilities of the health officer. Let's work in a harmonious spirit in the interest of the patient and in the interest of the public or the community as a whole.

I wish to again thank the men who have contributed to this program, and I think I am not presumptuous in stating that it has been a success. And I again thank every man who participated in the discussions. I hope this section in and through the coming years may be the means of bringing closer together our doctors, whether your specialty be that of a general practitioner of curative medicine or a health officer who does only preventive medicine.

Dr. Haney (closing): I wish to thank each person who discussed this paper and to express my appreciation for the good points that were brought out. In my paper no attempt was made to go into detail as to what should be taught. The paper was an outline, and I took for granted that the health department personnel would be interested in their work, and they should be especially trained in the work of public health. If this be true, the personnel will outline and direct the right teaching, i.e., the right type of education.

I agree with Dr. Applewhite, and others taking part in the discussion, that immunization is not all that is necessary in the control of typhoid. I think the permanent control is by building and using sanitary pit toilets, properly constructed sewer connections, and other means recognized by the State Board of Health as adequate for sewerage disposal.

I wish to state that I agree with Dr. Lippincott that there should be definite attention given to bacillary dysentery. I think one of the most important public health problems concerns this, and that we should give special attention to diagnosis, care, and prevention of dysentery.

I wish to thank Dr. Robinson for his part of the discussion. I think that our educational efforts should be constant and uniform. By this, I mean we should not have special campaigns waged with a "whole lot of whoopee" for that special project

and then let our interest die down. Our enthusiasm should not rise and fall. We should have, as Dr. Williams mentioned, a uniform program; one that will include all that is necessary, all that is needed for our particular community. I think this is one of the means of determining the quality and efficiency of the health officer; namely, his ability to determine what is needed in his community, what the activities of the health department in any particular instance should be—what should be, and what should not be emphasized. We should have a uniform, adequate program. I agree with Dr. Landam that the health officer should be especially informed on communicable diseases, diagnosis, and control methods. He made the statement that he went with his physicians on cases of communicable disease. I think this is right. The health officer in the community should be available to physicians for consultations on communicable diseases and other problems of public health. The health officer should be especially trained in public health and be able to give constructive health consultation and advice not only to physicians in the community, but to every individual in the community. Physicians and other persons in the community should call upon the health officer for consultation and advice, and he should be available for this service at all times.

HIGH FREQUENCY ARC RESECTION OF THE PROSTATE.

H. W. E. WALTHER, M. D.,

NEW ORLEANS.

Urology has passed a third mile-stone on its hike along the highway of intravesical procedures. First, the crushing of moderate sized stones in the bladder and the intraureteral manipulation and delivery of impacted calculi in the lower ureter received the approval of even the most skeptical. Second, the high frequency spark destruction of pedunculated tumors of the bladder completely revolutionized our therapy directed at this type of vesical growth. And, third, the recent perfection of the radio cutting loop under water opens up a field for removing vesical neck constrictures, median bars, moderately enlarged middle or lateral lobes and hypertrophied sub-cervical glands in elderly male patients with symptoms of prostatism—a procedure much more safe and requiring a shorter

period of hospitalization than the open operations have hitherto demanded.

As with all epoch-making advances in surgery, this attack upon bladder-neck obstructions by means of intricate, electro-surgical cutting devices, employed through an insulated endoscopic sheath, has brought much grief to those workers whose enthusiasm carried them too far afield. The size of the prostatic enlargement, the location of the obstructing lobes, the cellular pathology of the growth in question, the physical status of the individual—particularly as regards his heart and kidneys—all these and more demand careful attention before electro-surgical resection can be planned with safety. This procedure, comparatively simple in experienced hands, requires, for its success, the same preoperative study and preparation that has marked the preliminary measures leading to a suprapubic cystotomy. Laboratory and bedside studies furnish indispensable data in arriving at a decision.

It should be stated at the outset that resection is not going to replace prostatectomy. The procedure is too new to give any fixed ratio but those urologists best competent to express an opinion state that about 33 per cent of cases of prostatism can be relieved by this means. Whether or not this percentage will be revised upwards in the future, due to refinements in technique and in mechanical construction of the resectoscopes now in use, time alone will tell.

Many instruments have been introduced during the past seven years beginning with the resectoscope of Stern in 1926. I am speaking only of high frequency arc cutting instruments. In 1927 Davis presented a modification of the Stern apparatus. Finally, McCarthy suggested a visual prostatic electrotome which, I think I can say without fear of contradiction, is the instrument most popular today.

Two types of surgical units for furnishing the necessary high frequency current

for cutting are in use. First, we have the spark gap machine of which the Bovie unit is a representative example, using damped current of intermittent bursts of energy, and, second, the McCarthy unit using a vacuum tube amplification with continuous current flow of the undamped type. Both models have their advocates. According to electro-physicists, the damped or spark gap current cuts more deeply, causing more slough of tissue, and is supposed to coagulate bleeding vessels best; while the undamped or vacuum tube current (the principal in the radio knife) cuts with a minimum desiccation of underlying tissue, producing practically no slough and yet coagulates bleeders instantly.

This matter of controlling bleeding during resection has been the subject of so much dispute that it appears high time to settle the matter once and for all. Salesmen and the advertisements of manufacturers of high frequency apparatus are largely responsible for propaganda to the effect that whereas vacuum tube units resect better than spark gap machines, they are not dependable in arresting hemorrhage. The work in our urological service at the Southern Baptist Hospital has been confined solely to the vacuum tube unit of McCarthy and after a year of experience with it we can attest to the fact that, after perfecting our technique, it has never failed to stop bleeding points promptly, effectively and permanently. It would appear rational therefore to conclude that the undamped current is superior to the damped. Until more time has elapsed, it is to be hoped that those using the Bovie or similar units will keep accurate tabulation of reactions following prostatic resections, post-manipulative hemorrhage and functional results, not alone as regards reestablishment of urinary stream and the presence or absence of vesical residual, but also proof that deep high frequency current penetration leaves the lower ureters perfectly unobstructed and that the ejaculatory ducts do not become occluded by scar contracture.

The clinical selection of cases amenable for transurethral prostatic resection is most important. With most of us it is customary to group these cases according to size or location of obstructing factors, as determined at cystoscopy. With us type IV represents a gland whose lateral and middle lobes practically fill the bladder and where the residual varies from 200 c.c. to 600 c.c. or more. Type III presents less adenomatous projection and less than 200 c.c. residual. Type II includes early lateral lobe enlargement or median lobe encroachment sufficiently marked as to retard the patient's voiding comfortably. Type I represents vesical neck contractures, median bars and small middle lobes of the ball-valve variety. Obviously, such a grouping is arbitrary. Every cystoscopist formulates his own classification, suitable to his needs, which represents his personal interpretation.

TABLE OF STATISTICS ON PROSTATIC RESECTION.

Operator	Number of Cases	Deaths	Method
C. W. Collings.....	800	2	Collings
T. M. Davis.....	470	1	McCarthy-Davis
H. C. Bumpus.....	250	4	Caulk-Braasch-Bumpus
J. F. McCarthy.....	150	1	Stern-McCarthy
W. J. Engel.....	136	2	Caulk-Stern-McCarthy
R. V. Day.....	74	3	Day-McCarthy
Total	1880	13	

The point is, that types I and II are adaptable to resection operations and types III and IV are not. Under spinal anesthesia the removal of from 5 to 10 grams of obstructing tissue can be removed in an hour. In these patients the bleeding is usually of little moment and easily controlled. In types III and IV, where the obstructing masses may weigh anywhere from 50 to 100 grams or more, two hours or longer may be required to remove sufficient tumor material to do good. Such prolonged manipulation not alone predisposes to additional shock but the loss of blood is often considerable and the attempts to stop the bleeding proportionately difficult.

Even in selected cases, the post-instrumental convalescence must not be minim-

ized. The reactionary, edematous swelling at the bladder-neck is pronounced in most cases and chills and fever are not infrequently observed on the second or third post-operative day. A cloudy urine will persist for several weeks. Such reactions should be anticipated and can frequently be reduced to a minimum by intravenous injections of methenamine given twice daily a few days before and for many days following the resection.

As to after care, an indwelling, whistle-tip catheter (sizes 24 F. or 26 F.) is fixed into place for drainage and for pressure over the raw surfaces produced by the high frequency loop. We allow this catheter to remain in place for from 48 to 96 hours, depending upon the color of the bladder washings and the amount of urethral irritation such a foreign body produces. During the period of indwelling catheter drainage the bladder is kept clean with vesical lavages, given three times daily with .25 per cent Dakin solution.

Many workers in this field consider it the operation of choice in relieving obstructions due to carcinoma of the prostate. So far we have had no experience with the procedure in malignant growths. In secondary contractures following prostatectomy, it should be the operation of choice.

Of the complications accompanying resection, as reported by various urologists, acute pyelonephritis, epididymitis, extravasation of urine, delayed hemorrhage, cardiac decompensation and septicemia have been observed. Where proper selection of cases is practiced, limiting oneself to those cases falling in groups I and II, where thorough pre-operative study is carried out and where the preliminary preparation is adequate (indwelling catheter decompression, bilateral vaso-ligation, etc.), a minimum of difficulty should be experienced.

The permanency of the relief afforded by the method can be judged only by the statements of such pioneers in the field as Caulk,

Bumpus and Davis who report no recurrence of symptoms over a five-year period. But even where subsequent obstruction develops, a second resection should hold precedence over the open operation. The element of safety along with the economic consideration of time saved should prompt such a stand.

We have applied high frequency arc resection in eleven cases of prostatism. No fatality occurred in the series. All of our patients represented obstructions falling within groups I and II. Suprapubic cystotomy had to be resorted to following the first resection in order to arrest hemorrhage. This was due solely to faulty technic owing to our inexperience with the method. In none of the remaining cases have we failed to give complete relief. The average stay in the hospital was fourteen days. The highest febrile reactions reached 105°F. and these lasted but a few hours.

Our experiences, limited though they be, convince us of the rationality of the procedure in carefully selected cases. It should not be attempted by those inexperienced in the use of modern electro-surgical apparatus. In advanced adenomatous growths it should not be considered. Transurethral resection should encourage many prostatists to seek aid earlier than has hitherto been the custom. Dread of a prostatectomy need no longer deter sufferers from securing help where resection appears to offer the desired relief.

THE DIAGNOSIS AND SURGICAL TREATMENT OF DUODENAL ULCER.*

R. L. SANDERS, M. D.

MEMPHIS, TENN.

An observer of the trends of surgery will have noticed that the surgeon is becoming more and more sensitive to physiologic processes and to his responsi-

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bility for maintaining them so far as is possible. When an operation has been performed successfully and the patient continues to suffer it is usually for one of two reasons: a mistaken diagnosis or a too drastic interference with physiologic processes. There is no branch of surgery in which this applies with greater force than in the treatment of ulcer of the duodenum. The problems of duodenal ulcer are primarily problems of physiology.

The surgeon, by the very nature of his calling, is absolved from the great law of medical practice which says, "Thou shalt do no harm." To him it is allowed to do evil that good may result. Since in his work evil must be mingled with good, he must strive to unite the maximum of good with the minimum of evil. This throws upon him the heavy responsibility of determining the true nature of the disease and weighing carefully the damage to be done against the benefit to be derived.

The error of diagnosing an ulcer when no ulcer is present may be a serious one for the surgeon. Moynihan¹ says that the high repute of both medical and surgical treatment have been earned in some instances by a process of make-believe. Medical treatment for an imagined ulcer can do no harm, but surgery for an ulcer that does not exist may do irreparable harm. Gastro-enterostomy cannot be expected to cure lead poisoning, the vomiting of pregnancy, visceroptosis, gall stones, *tabes dorsalis*, or *achlorhydria*. Yet Moynihan has known it to be performed for all of these. The indifferent results from this operation are found largely in that group of cases characterized by indeterminate symptoms, often of extra-gastric or extra-duodenal origin.

CLINICAL PHASES

In uncomplicated duodenal ulcer the clinical picture is characteristic. It is a disease which affects principally young and middle aged adults, although it is seen in persons of all ages. The incidence is higher in males, the ratio being about 3 or 4 to 1.

Periodicity.—The periodicity of the attacks is striking. They occur usually in the spring and fall seasons, last from two to six weeks, and then completely remit. In contrast to other diseases producing similar symptoms, patients with duodenal ulcer complain daily during its activity. In the intervals between attacks they are quite comfortable and, as a rule, are not troubled with indigestion. The complete remission is as diagnostic as the attack. The entire picture may change, however, with the onset of complications. In some cases the disease may become perennial and resist all treatment measures other than surgery.

Pain.—Pain is the outstanding complaint in almost every case. It is referred to as a "hunger pain" or an "empty feeling" with a desire for food and drink. When the ulcer is not complicated, the pain begins from two to four hours after meals. Food or alkalis will bring almost immediate relief. If obstruction develops, food ease is less marked, and in many of the perennial cases food will not afford relief.

In an experience with more than 1000 cases, Ralph C. Brown² found no patient without some degree of hunger pain. Fifty-one per cent described the sensation as actual pain, while 49 per cent were content to call it distress. In all his cases the symptom was invariably relieved by food or alkalis. With rare exceptions, it was epigastric and sharply localized. Our observations in a series of 574 cases have been almost identical with those of Brown.

Although this symptom of food relief appears to be universal in duodenal ulcer, it is not a feature of that condition alone. Higgins³ had a number of cases of chronic cholecystitis and chronic appendicitis in which pain was relieved by food.

Just what produces hunger pain is not clearly understood. Neither hyperchlorhydria nor hyperperistalsis are necessary conditions, although they are usually present. It seems probable that the inflammation around the ulcer lowers the threshold for

painful stimuli in the nerve endings in the mucosa of the stomach and duodenum, so that any of various factors, as local spasm around the ulcer, excessive acid, acid corrosion, or even normal peristalsis, is able to induce pain. Akerlund⁴ believes that spasm of the bulb is a cause. It would appear, therefore, that any factor which brings about pylorospasm can be the responsible agent. It is well known that the normal mucous membrane of the bowel is insensitive to clamping or cutting, but becomes sensitive when congested or edematous. Congestion follows pylorospasm. Pylorospasm can result from irritation anywhere in the peritoneal cavity. This would explain the hunger pain noted in appendicitis and cholecystitis. In the latter, the tug of an adherent gall bladder on the duodenum, which has a limited range of motion, could likewise give rise to duodenal irritation, with consequent pylorospasm. Adhesions were present in all cases of cholecystitis with hunger pain in Higgins' series, as well as in many of ours.

Hemorrhage—Hemorrhage is another important clinical symptom of ulcer and indicates that the ulcer is active. It occurred in 25.2 per cent of our cases. A sudden, massive hemorrhage may be the first symptom observed in certain cases. In others, there may be a slight seepage, which appears as occult blood in the stools. With the latter type, a secondary anemia may be the sign which leads to discovery of ulcer. The hemorrhage from a duodenal ulcer is more likely to appear as an intestinal than as a gastric hemorrhage. The presence of the pyloric sphincter determines by which route the blood shall escape in the majority of cases.

Gastric Distress—In a small group of ulcer patients the only definite gastric symptoms may be discomfort in the abdomen, occasional diarrhea accompanied by loss of appetite, weight and strength, gaseous eructation, water brash or heart burn, and nausea with occasional vomiting. The diagnosis may be unsuspected until the lesion is found by the roentgenologist.

Excessive hydrochloric acid does not always explain these symptoms. They may be caused by reverse peristalsis, which brings the normal secretion to a part of the stomach where it is not normally found and which is not physiologically adapted to its presence. Irritation about the pylorus has the effect of speeding up the rate of contractions in the pyloric end of the greater curvature, where they are normally slow. The change in the relative speed of contractions in this portion of the stomach can interfere with peristalsis to the extent of reversing the current and inducing regurgitation into the esophagus. The same reflex, with identical manifestations, may be produced by any irritation which brings about pylorospasm, notably inflammation of the appendix. Ulcer of the duodenum should always be considered in the patient with recurring attacks of "indigestion", but it must be borne in mind that this is only one of a number of diagnostic possibilities.

Pylorospasm plays a prominent part in originating the clinical symptoms, as well as the roentgenologic picture of ulcer of the duodenum. Lahey⁵ designates pylorospasm as the most undesirable single factor associated with either duodenal or gastric ulcer. Hyperperistalsis, excessive gastric secretion, and hyperacidity are all probably dependent on spasm of the pylorus, and any method of treatment which offers the best prospects of relief includes preeminently measures which will obviate pylorospasm. In reality, both medical and surgical treatment accomplish the same result: the relief of pylorospasm.

EXAMINATION

Physical Examination.—In the diagnosis of uncomplicated duodenal ulcer the physical examination has little value. It may reveal possible foci of infection in the teeth and tonsils and certain infections about the anus and rectum, which may be regarded as etiologic factors. A localized tenderness in the right lower quadrant may indicate chronic appendicitis, long recognized as a possible cause of ulcer. As a rule, when the ulcer is quiescent, no tenderness is

elicited over the region of the duodenum. When it is active, a small area of tenderness often may be found a little below the costal margin near the median line, corresponding to the location of the duodenum. If there is a protected perforation and localized edema, a mass is sometimes palpable.

Gastric Analysis.—Gastric analysis, although relatively unimportant, should be made routinely when not contra-indicated by some acute condition. According to Sippy,⁶ hyperacidity is present in about 50 per cent of ulcer patients. In Moynihan's¹ experience it is found in the majority of cases. Ulcer, however, may develop when hydrochloric acid is absent.

Roentgenologic Examination.—The final diagnosis of duodenal ulcer should depend chiefly on the findings in the roentgenologic examination. The presence of a true ulcer in the duodenal cap gives rise to certain well known and definite types of deformity. With the exception of the niche, which appears as the ulcer crater on the screen or in the roentgenogram, these deformities represent changes resulting indirectly from the ulcer. Identical changes may result, however, from other pathologic conditions outside the stomach and duodenum.

There is a difference of opinion as to the frequency with which the niche can be demonstrated in duodenal ulcer, and hence as to its importance in diagnosis. Akerlund⁴ states that the duodenal niche occurs as often and has the same significance as a similar niche in gastric ulcer. Duval, Roux, and Bécclère⁷ hold that, under proper technique, the niche may be visualized in every case. Few authors can be so dogmatic in this observation.

The niche in duodenal ulcer differs in some points from that in ulcer of the stomach. Its borders are more irregular, and neither a fluid level nor a bubble of air need be present. Niches may be located on both curvatures of the bulb and on the pyloric border, but by far the most common

site is the lesser curvature. Its appearance is that of a bud growing out from the outline of the curvature or a suspended spot near the center of the bulb. It can be produced in all the anatomic stages of the ulcer: in the perforated, the closed, the indurated, the parietal ulcer whether indurated or not, and in the cicatrices recovered by mucosa. The roentgenogram cannot, as a rule, show the anatomic degree of the ulceration evidenced by the niche.

A typical deformity often found with the niche is retraction of the lesser curvature of the bulb. This is a straightening out of the normally convex outline until it becomes rectilinear, or even concave. A number of explanations of this phenomenon have been offered, one being infiltration of the wall around the ulcer. This would account for the fact that if it appears in one film, it appears in all, even those taken after an interval. Its diagnostic value is appreciable.

Opposite the ulcer may be found an incisura, which corresponds to a similar deformity seen in gastric ulcer. If the incisura is not permanent, but changing from day to day, at operation nothing may be seen locally to account for the deformity. The condition may be caused by spasm secondary to an extrinsic lesion, as is frequently seen in cholecystitis and appendicitis. Spasm of the duodenum as an accompaniment of ulcer probably explains the intermittency and intensity of those symptoms considered characteristic of the disease.

In the presence of duodenal ulcer the roentgenologist may note hyperperistalsis with paradoxical retention in an otherwise normal stomach. This sign, which is valuable in the diagnosis, usually can be observed at a comparatively early stage of the disease.

In our clinic, an examination by a competent roentgenologist is regarded as indispensable in the completed diagnosis of duodenal ulcer.

TREATMENT

There is probably a wider divergence of opinion regarding the treatment of duodenal ulcer than of any other pathologic condition in the entire body. What the patient with duodenal ulcer would like to know, and has a right to know, is: What type of treatment will entail the smallest risk to his life, will restore him to health within a reasonable length of time, and will give him the best prospect of remaining well under ordinary dietary and working conditions? Fortunately, it may be stated definitely that physicians and surgeons are approaching agreement on this subject. They are beginning to realize that for the best results they must cooperate closely and cordially, to the end that all ulcers which offer good prospects of cure by medical methods shall receive medical treatment, and those which do not heal after a sufficient but not over-prolonged trial of medical management, as well as those that develop complications, shall have the benefit of prompt surgery. Ulcer of the duodenum should no longer be a field of rivalry for internist and surgeon. It should be understood that, in a sense, operation is an interlude in the course of medical treatment. Except in the face of such an emergency as perforation, the surgical ulcer patient should be prepared for operation by medical treatment, and in all cases prolonged medical management should follow operation. It would be a grave mistake to allow the patient to suppose operation absolved him at one stroke from the dietary regime and other restrictions which constitute successful treatment. Most surgical failures in ulcer are the result, Sullivan⁸ believes, of inadequate postoperative therapy.

In this country and in England the opinion now prevails that every uncomplicated ulcer should first be treated medically and should come to surgery only when medicine has proved a failure. This trial must not be haphazard or half-hearted. The patient must be made to regard it as seriously as operation and must carry it out diligently

and exactly as directed. Moynihan⁵ confesses to a leaning toward medical management rather than surgery, but insists that medical treatment of ulcer is "beyond all reckoning more dangerous than surgical treatment," and that it can be made a safe substitute for surgery in a greater number of cases only as general practitioners and physicians realize the need of conscientious and persistent treatment. But conservative measures should not be continued after it has become clear that the ulcer is not responding. It is not enough to hold symptoms in abeyance. If the ulcer fails to heal firmly after a reasonable period, operation presents the safer course; otherwise, the patient remains in constant danger.

Surgical Procedures. — Gastro-enterostomy was the classic surgical procedure for ulcer of the duodenum for many years. It retains that position today in America and England, but on the continent of Europe, especially in Austrian and German clinics, it has been for the most part superseded by partial gastrectomy. In New York City, a group of surgeons centered around Mt. Sinai Hospital are likewise strong advocates of the newer and more radical method.

In a certain group of cases pyloroplasty offers several advantages and is preferable to any other procedure.

It is being pointed out that gastro-enterostomy should not be performed without the actual demonstration of an ulcer. Moynihan,¹ among others, insists that the ulcer be attacked directly; unless this is done the procedure is inadequate and likely to give dissatisfaction. Other surgeons, however, believe that an ulcer in the duodenum may safely be left undisturbed and that it will heal if spared contact with the acid chyme. If there is no obstruction at the pylorus, experience has shown that the greater part of the stomach contents will leave by way of the pylorus rather than by the gastro-enterostomy stoma and that the ulcer will not be spared this contact after all. This difficulty may be overcome by temporarily ligating the pylorus, being careful not to cut off the blood supply, in order to give

the ulcer time to heal. Permanent occlusion by division of the pylorus has not fulfilled expectations as a routine adjunct to gastro-enterostomy. In the presence of marked obstruction, a simple posterior gastro-enterostomy leaves little to be desired; complications are few and the end result most gratifying.

In a selected group of cases, the operation of pyloroplasty is rapidly gaining preference over gastro-enterostomy. This is especially true in those in which the duodenum can be mobilized. By pyloroplasty one is able to make a direct attack on the ulcer, overcome pylorospasm, effect better drainage and inter-change of acid and alkali secretions, and maintain normal anatomic and physiologic relations. The incidence of gastro-jejunal ulcers is obviated and recurrences are few. The risk is probably less than the risk of gastro-enterostomy. When the ulcer is sufficiently near the pylorus to be included in the incision, pyloroplasty is the method of choice, in Finney's⁹ opinion. Lahey⁵ believes that pyloroplasty with partial excision of the pyloric sphincter offers the most hope for the future in the surgery of duodenal ulcer. Judd's¹⁰ operation consists of removal of the ulcer and a large anterior portion of the pyloric sphincter, with suture of the stomach and duodenum transversely to the long axis of the lumen. This method, he states, is applicable in about 50 per cent of cases. Simple excision of the ulcer without any supplementary procedure is not so satisfactory, as it is not designed to relieve pylorospasm and effect better drainage. Horsley's¹¹ pyloroplasty is satisfactory in the majority of cases.

In the radical operation for duodenal ulcer a large part of the stomach and the ulcer-bearing portion of the duodenum are resected. If resection of the duodenum appears too dangerous because of the risk of injury to the pancreas or biliary tract, as, for example, when an ulcer has penetrated the pancreas and involves the common bile duct in callus infiltration, the pylorus is

excluded by section through the antrum of the stomach and closure of the distal portion, after the manner of Devine.

Burke¹² states that in Vienna the most popular type of operation is the Billroth II. When conditions are favorable, the Billroth I is used and the normal physiology is not disturbed. Von Haberer is perhaps the most active and eminent supporter of partial gastrectomy for duodenal ulcer. In his clinic it is the routine surgical treatment. Among his 2310 cases of gastric resection, Billroth I was used in 1273 and Billroth II in 705 cases. Finsterer¹⁴ believes the best end results are obtained by extensive resection. In the operation which he recommends, the line of separation of the stomach lies in the line of the direct continuation of the esophagus. The anastomosis is between the resected border of the stomach and the first jejunal loop is about 10 cm. in width. He states that this has a distinct advantage over anastomosis of the whole width of the stomach in that retrograde filling of the afferent loop of the duodenum is obviated. In Finsterer's clinic, gastro-enterostomy for gastric or duodenal ulcer has been practically abandoned.

Finsterer believes removal of the antrum, which represents the motor of the secretory apparatus, and the pars media of the stomach, in which the hydrochloric acid is secreted, permanently lowers gastric acidity, so that chyme can be received with impunity on the jejunal mucosa. On this ground, resection of the stomach for duodenal ulcer is generally advocated. Time has shown, however, that the operation does not always prevent jejunal ulcer, but greatly reduces its incidence. Berg,¹⁵ in New York, and Konjetzny,¹⁶ in Germany, do not consider that the operation relies for success on anacidity, but emphasize its effect in eliminating gastritis.

It is now becoming generally believed that there is a marked difference, pathologically, in the conditions found in European clinics and those found in our own country. Multiple ulcers and an associated

gastritis are the rule among the Germans, whereas they are the exception in America. A simple gastro-enterostomy will not cure a duodenal ulcer with an associated gastritis. It is probable that for this reason the Germans are practicing radical resection in the majority of cases, and rightly so.

Much of the enthusiasm for gastrectomy appears to be in the nature of a revolt against the poor late results too often obtained after gastro-enterostomy. The future choice between these two operations as standard procedures for duodenal ulcer must rest largely on a comparison of existing disease and mortality rate. The figures given for different clinics vary so widely that it would appear the time has not yet come when a final choice can be made. In certain European clinics a definitely lower mortality rate is claimed for resection than for gastro-enterostomy. Denk¹⁷ gives the mortality for simple gastro-enterostomy as 5.5 per cent and that for resection as 3.9 per cent. Berg,¹⁵ in this country, reports an operative mortality of 6.9 per cent after primary gastric resection, by which he means those cases in which no previous major operation was done, and 20.9 per cent when there was such an operation in the past. The difference is ascribed to the presence of adhesions. It may well be that finally gastro-enterostomy or pyloroplasty will come to be regarded as the better method, but it is doubtful that gastrectomy will be abandoned altogether. Such is the way of progress when sincerity and intelligence are found in both ranks.

The experience of the operator with the operation which he is performing is an important factor in mortality. Gastric resection is more difficult and its safe performance requires a larger experience than is the case with gastro-enterostomy or pyloroplasty. Sullivan⁸ brings out clearly this point. Gastro-enterostomy by an expert who performs it hundreds of times a year carries about 2 per cent mortality, but with the average good surgeon the rate is between 6 and 9 per cent. Partial gastrectomy

in the hands of a few may show a mortality of only 5 per cent; in the hands of the untrained it may rise as high as 10 to 45 per cent.

Considering the type of pathologic conditions we see in this country, I believe some suitable method of pyloroplasty, or a simple gastro-enterostomy when indicated, is still the method of choice in duodenal ulcer.

Complications.—The complications of ulcer which may occur in the course of medical treatment and require operation are hemorrhage, perforation, and obstruction.

Operation during active hemorrhage carries a very high mortality. With rare exceptions, surgery should be postponed until bleeding has stopped and the patient has been fortified to withstand laparotomy. A single massive hemorrhage is not an indication for operation, but repeated large hemorrhages or the seepage of blood which cannot be controlled by medical treatment call for surgical intervention. In such cases the ulcer must be excised or destroyed by cautery, the vessels must be ligated, and the ulcer enfolded and sutured. Gastro-enterostomy, therefore is not sufficient for a bleeding ulcer.

Prompt surgery is always indicated in perforation. The mortality increases in almost direct ratio to the number of hours which elapse between rupture and operation. The first consideration is stoppage of the leak. This is a life-saving measure. Further procedure will depend on the condition of the lesion and on the patient's general state. If the operation is done within the first six hours, I have closed the ulcer, done a gastro-enterostomy, and closed the abdomen without drainage in most cases, with good results.

The origin of pyloric or duodenal obstruction will determine the necessity for operation. If spasm, edema, or congestion are factors, surgery is not required; the obstruction yields readily to medical measures in the majority of these conditions. In the presence of cicatricial deformity, however, operation is indicated. Sullivan⁸ says that

the brightest spot in the therapy of ulcer is the treatment of true pyloric obstruction from duodenal ulcer by gastro-enterostomy. Ninety per cent of good late results are obtained.

RESUME OF OUR EXPERIENCE

In our series of 574 cases, 435 or 67.5 per cent of the patients were treated medically, and 139 or 22.5 per cent had operations. A simple gastro-enterostomy was performed in 103 and pyloroplasty in 33. The Judd type was employed in 24, the Horsley in 7, and the Heineke-Mikulicz in 2. Gastro-jejunal ulcer occurred in about 3 per cent of the gastro-enterostomy cases. There were no untoward complications in the pyloroplasty group. When conditions permit, we now do some type of pyloroplasty, preferably the Judd. Gastro-enterostomy is the method of choice when pyloroplasty is not possible; it is also used in all obstruction cases. Primary resection was not done in any case, as there was no associated severe gastritis which called for the more formidable operation.

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GUNSHOT WOUNDS OF THE ABDOMEN.*

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Emergency surgery of the abdomen constitutes one of the most interesting chapters in the experience of those doing general surgery. The history, signs and symptoms of abdominal trauma are often perplexing, and we have difficulty in arriving at an exact diagnosis; the treatment and prognosis not infrequently predispose to grave concern and perhaps sleepless nights.

Of particular significance are those penetrating wounds of the abdomen caused by missiles projected by gunpowder. They have been of interest to medical men, possibly since the discovery of gunpowder by the Chinese centuries ago. Although gunpowder was introduced into Europe by the Moors in the 14th century, it was not until the 16th century that we find any record of its common use in warfare. One can only surmise as to the mortality resulting from abdominal wounds inflicted by the primitive firearms of those days. Even during our own Revolutionary War there

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is scant information of the mortality of abdominal wounds inflicted by bullets fired by red coated soldiers or painted Indians; it was probably approximately 95 per cent. Concerning later wars we have more accurate data. During the Civil War, Loria² quoting Lagrade, places the mortality at 90 per cent; in the Franco-German War it was 69 per cent; 67.1 per cent in the Spanish American War; and 53.9 per cent among 1200 cases in the British Expeditionary Forces during the World War. This shows that the mortality in military practice has steadily decreased. Generally speaking, the mortality in civil practice is somewhat lower than that in warfare. This is to be expected, since in civil practice we do not ordinarily encounter wounds made by large size missiles and projected by such a great velocity; also the time factor and degree of exposure are not so great. Mortality percentages in civil practice vary from 30 per cent quoted by McGuire³ in 1920, 35 per cent by Willis⁴ in 1931, to 60.7 per cent in the New Orleans Charity Hospital during 1925-1926.

Whether in military or civil practice these injuries make up an interesting and most important surgical problem, and such a group of cases with at best a tremendously high mortality, should demand our earnest consideration as to the cause and prevention of such a serious loss of life. It is not my intention or purpose to advocate any new method of medical or surgical treatment, but chiefly to call attention to this rapidly growing number of injuries, and to discuss some of the more recent advances in diagnosis and treatment of these serious cases.

DIAGNOSIS

Diagnosis in this group of cases consists of more than the mere knowledge that the patient is the victim of a gunshot wound. We should have an idea of what viscera are likely injured, and the probable extent of such injury, before attempting surgical treatment. Very important in arriving at such a diagnosis is the elicitation of a careful history. The type of firearm used

should be known—whether pistol, rifle or shotgun. The calibre of the bullet is of importance, for certainly we should expect more damage from a .38 or .44 than from a .22. The character of the missile will give much information; a wound resulting from a soft lead missile will differ materially from that caused by the penetration with greater velocity of a steel or brass jacketed one. Lead tends to spread when it strikes, and especially if bony parts are involved in the injury, we would expect to find a larger gaping wound similar to, though perhaps less extensive than, that caused by a soft dum-dum bullet. Damage to bone will probably not be as severe when inflicted by a lead bullet as when struck by a steel jacketed one; conversely we may expect more damage to soft structures by a lead bullet. The distance from which the shot was fired is of no little significance. Generally speaking, the penetrating power of a pistol shot is greater at close range and that of a rifle bullet greater when fired from some distance away. Shotgun wounds resulting from small sized shot may be of little significance when fired from a distance. The position of the one firing the gun in relation to the patient at the time of the accident is also valuable information.

In examining the patient, note the size of the wound of entrance. The probable direction taken by the missile can also be judged. There may be a wound of exit, and in such cases much information as to what viscera are likely injured can be determined by passing an imaginary line through these wounds. In case there is no wound of exit, grooving of the skin, as pointed out by Connors,¹ will give important information concerning the direction taken by the bullet. If it is plain on examination that bony structures are involved, then any accurate idea as to the bullets course is confusing, and one should resort to fluoroscopic or roentgen ray examination. Even then it is difficult or impossible to determine the course taken by a wandering bullet.

Evidence of shock or hemorrhage, or both, should be noted. Most of these patients are considerably shocked, and this condition may mask or confuse one of hemorrhage. I believe that this is a leading contributing factor to many deaths, because a shocked patient is always a poor operative risk, while on the other hand, a bleeding patient should have operative intervention at the earliest possible moment. Loria² has shown that 70 per cent of those patients operated upon during the first hour died, while of those operated upon after the second hour 48 per cent died. It is therefore clear that there is a distinct advantage in treating the patient's shock or allowing sufficient time for favorable reaction to take place. I believe it is the better policy to give him this chance than to perform laparotomy too hastily on the mere suspicion of hemorrhage. Blood and pulse pressure determinations before and after transfusion or other intravenous fluids will frequently differentiate between shock and hemorrhage, and often indicate the way to sound surgical judgment.

TREATMENT

I believe that every patient with a gunshot wound of the abdomen is entitled to the benefits that might be derived from operative intervention. In this belief I do not stand alone. The question is, when to operate. It is often easy to err. Let me illustrate with two cases recently observed in my own practice. The first was a man, aged 22 years, with splendidly developed abdominal muscles, who was shot in the abdomen at close range with a .32 calibre pistol. On examination I found a small wound of entrance at the level of the umbilicus and slightly to the left. He complained of severe pain in the abdomen. There was no evidence of shock, nor was there any nausea or vomiting. His temperature, pulse and respiration were normal. There was abdominal tenderness but no marked rigidity. In view of his history and the location of the wound, I decided to open the abdomen. Under ether anesthesia a left rectus incision was made through the

wound. The bullet was found lying on the peritoneum and had not entered the abdominal cavity. The peritoneum was, of course, not opened, and he made an uneventful recovery. The second case was that of an eleven year old boy who was shot in the abdomen by one of his playmates with a toy "blank cartridge" pistol. Unfortunately a .22 short cartridge had been placed in the "toy" instead of the usual blank. He was a well muscled lad apparently in good condition and complained of no pain of any consequence. There was no sign of shock or hemorrhage; temperature, 98.4°F.; pulse, 90; and respiration, 20. On examination I found a wound of entrance just above and to the left of the umbilicus. There was very little tenderness and no rigidity on deep pressure. There was not much evidence that the bullet had entered the abdomen, yet due to the possibility of its having done so and to the boy's generally good condition, I decided to explore. Under ether anesthesia a midline incision was made; free blood was found in the peritoneal cavity which was coming from a punctured bleeding wound in the mesentery, this was ligated with no resulting discoloration of the bowel; punctured wounds were found in the first portion of the jejunum and in the transverse colon. These were repaired in the usual manner, the abdomen drained and closed. He reacted from the operation nicely and for several hours was in fair condition. He soon developed profound shock, however, from which he died about the twelfth hour post-operatively. In the first case there was every reason to suspect that a .32 calibre bullet fired at close range would have entered the abdominal cavity; whereas in the second case a .22 calibre short bullet fired from a toy pistol without rifling would hardly be suspected of penetrating the muscles, particularly so in the absence of symptoms.

Shock should be combatted with the usual therapeutic medication, blood transfusion, and, in the absence of a donor, glucose intravenously. I would particularly

stress the importance of keeping the patient warm by the use of blankets, hot water bottles or electric pads. This should be maintained not only until the patient has reacted from the shock, but also during the course of the operation. Obvious hemorrhage demands immediate operative control as stated above.

Assuming the patient has reacted from shock sufficiently to justify operative measures, the abdomen is then opened through an incision long enough to permit thorough exploration. Of injuries to the hollow viscera those to the stomach and small bowel are the least dangerous. They, of course, demand suture and in the case of the small bowel, a judicious use of the omentum. Large lacerating injuries may require resection. Injuries to the mesentery may be quite serious by cutting off the blood supply to a particular segment of gut. Such a condition may also require resection. On the other hand injuries to the colon with resulting soiling of the peritoneum by its contents—always rich in bacterial flora of a virulent character—usually result in a widespread fulminating peritonitis from which few patients survive. In perforation of the spleen with free hemorrhage, it is probably better to perform splenectomy. Hemorrhage from the liver often arrests itself spontaneously, but may require a small packing to control. Perforation of the pancreas is a serious complication and calls for free drainage as the escape of pancreatic secretion into the abdominal cavity may cause necrosis of the abdominal contents with loss of life. Drainage is indicated in all cases except possibly those where the stomach is injured; even in these I see not objection to placing a small drain in the lower pole of the incision and leaving it in place for 24 to 48 hours. Tetanus antitoxin should be given in all cases.

Postoperatively it is important that the patient be placed in the Fowler position, kept warm, fluids forced by proctoclysis, hypodermoclysis or intravenously. Blood transfusion should be given as needed. Morphine is administered in sufficient

quantities to keep the patient comfortable. If there is evidence of gastric distention, then gastric lavage should be done, and if this persists it is wise to place a Jutte tube through the nares into the stomach. Enterostomy and hyperotonic saline intravenously are indicated if there is evidence of obstruction.

CONCLUSIONS

1. Gunshot wounds of the abdomen constitute a serious surgical problem. The mortality rate is high under the most favorable circumstances. These cases should demand our most careful attention.
2. The elicitation of a careful history and a thorough examination are all important. Roentgen ray and fluoroscopic examinations have definite indications.
3. Treatment of shock is probably the first prerequisite in the successful outcome of these patients.
4. Every case of gunshot wound of the abdomen is entitled to exploratory laparotomy.
5. Postoperatively it is necessary that the patient be kept warm and fluids forced. Complications should be anticipated and handled promptly as they arise.

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DISCUSSION

Dr. L. C. Feemster, Jr. (Tupelo): I have enjoyed the paper very much, but there is not much left to discuss. A few points that Dr. Smith did not have time to bring out I might mention.

He brought out the occurrence of this type of injury. Of course most of the advances have probably been made during periods of war. Following the Boer War the conclusion was drawn by most surgeons, from the experience of the war surgeons, that gunshot wounds of the abdomen should be treated conservatively, exploring very few. This was tried out at the outset of the World War, but the mortality was so high that it was quickly changed. As to gunshot wounds of the abdomen in civil practice, a large percentage are certainly of the type of patient that we know the prime object is to get them well, and

we do like to get them out of the hospital as soon as possible.

In the care of the wound should be mentioned cleansing the wound, doing a debridement, and any necessary repair of the external wound.

The importance of early surgery, not too early has been stressed by Dr. Smith, and is further emphasized by me. Shock should be overcome, and then not wait much longer. The statistics prove that after the first 24 hours, unless the patient has died from hemorrhage, the mortality from gunshot wound of the abdomen is much higher than where surgery is done before that time.

Some of these wounds do very little damage to the abdominal wall. However, some of them, if the gun is in close proximity to the abdominal wall, do much damage from concussion. Two cases I have had in the last few months have been interesting. The first was a rather obese negro woman. The pistol had been fired close to the abdomen and there was marked powder burn, the fascia being taken off clean. In dealing with this an incision was made through the puncture wound and repair made inside the abdomen. The wound externally was about 12x8. It was cleaned up as well as possible at the time and drainage put in at the lower angle of the incision. I was dressing that for two months. Three months later I had a similar case in which I attempted to do a wide debridement, and also did lateral drainage of the wound after the powder burn had been treated. In this case union took place much quicker and the patient remained in the hospital a much shorter time.

In these cases we should not only consider the external wound, but we must remember that the bullet may enter the body quite a distance from the abdomen and go down to the abdomen. In this type of wound where the bullet ricochets off the bony structure the roentgen ray will give us but little information.

Especially in penetrating wounds coming from the back, and also in those entering from the front and lying retroperitoneally, I think it is rather important to make thorough cleansing not only of the abdomen as we explore, but of the external wound itself. About four or five years ago I saw a patient die after the abdomen had been closed. An autopsy was done and upon opening the abdomen everything looked fine. We then made an examination of the posterior retroperitoneum and found an acute inflammatory cellulitis had killed the patient. In one or two cases I have had where the bullet ricocheted into the abdomen, thorough drainage was made through the external wound in the back.

As far as drainage of these cases is concerned, I think as a rule we probably drain more than is

necessary. How much harm that does, if any, is a question. Most of the wounds of the small bowel and stomach, except the lower colon, probably can be closed without any drainage, if gotten within a reasonable time after the accident.

I would like to stress the importance of making a wide incision in the abdomen to give you thorough exposure. The important thing is to find all the damage, then to diagnose the course of the bullet and the probably injured viscera in its course. These patients as a rule are in shock, and you have to make the initial incision where it will do the most good. To do this you must pay close attention to the course of the bullet.

Dr. W. W. Crawford (Hattiesburg): The doctor has brought us a very important paper and has discussed it in a thoroughly satisfactory way. I do not want to take much time in elaborating what has been said, but I would like to say in passing that there has been a wide variety of observations made with reference to the statistics on gunshot wounds of the abdomen. It seems apparent that these statistics are based upon certain fundamental facts that we cannot get away from, and when you take this into consideration you must realize that the man who seems to have done better than his colleague has had to deal with a different group of cases. The question of mortality in connection with these cases depends upon the time at which you get your patient. It is readily recognized that unless the patient is operated on during the early hours after the infliction of the wound, the chance of relieving him is very small, indeed. That is the first factor of safety.

Second, I believe those who have had to do largely with the negro patients must recognize the fact that the peritoneum of the negro is much more resistant than that of the white individual.

I shall never forget my first experience with a gunshot wound of the abdomen. It was in 1901, when as a young surgeon I did my first operation for this type of patient, a negro man with thirteen perforations in the intestines. Of course I did not expect him to get well, as almost all of them died in the hands of the best surgeons in the country in those days. Much to my surprise he recovered. After a few months' time I had another patient, almost a replica of the President McKinley case of the same year. This negro also got well in spite of the fact that on the second day he got up and walked around the room. I am sure these two patients recovered, not because of any skillful surgery, because they were my initial cases; but they got well because they had a high degree of resistance. I think it is important therefore, to bear these two things in mind when we consider the statistics.

The essayist also brought out the point of doing an exploratory laparotomy in connection with these cases. He mentioned the fact that a reasonable percentage are in shock when you see them. On the contrary, my observation has been that a great many are not in shock if you get them soon after the injury. The pulse may be practically normal, certainly less than 100, there is good volume and no signs of shock, and you wonder if the patient can have had a perforation. It is just here that you may make a fatal error in waiting. On more than one occasion I have opened an abdomen like that and found a number of perforations involving not only the small but the large intestine. I think it should be a fixed rule on the part of the surgeon to do an exploration in every case of gunshot wound of the abdomen; that he should at least follow the bullet far enough to see whether it has penetrated the peritoneum. You cannot be governed by the position at which the bullet struck the individual. We know a great many times the bullet ricochets around and comes out at a place where you think the viscera has been perforated, and yet when you make the incision and investigate you find the peritoneum has not been perforated at all. The opposite may be true. You may have a wound that in your judgment did not penetrate because of its position. You must not forget the fact in this connection that very often when the patient is shot his body is in an abnormal position, and maybe what would ordinarily seem to be the direction of the bullet that would have avoided penetration, shows a penetrating wound.

Now we come to the discussion of another group of cases. The doctor mentioned that in the Boer War they found a reasonable percentage of the cases when treated conservatively, got well. Of course we do not know how many of those cases really had penetrating wounds. We do know that there are several factors that may safeguard the patient. One would be the bacterial flora of the bowel itself. Another would be the amount of peristalsis following the infliction of the wound. That is many times influenced by the emergency treatment given the patient. I will never forget a patient found in my hospital a good many years ago when the American Medical Association met in New Orleans. I came home and found a negro, in one of our wards, who gave this history: Three or four days prior he had been shot in the abdomen with an entire load of squirrel shot, at reasonably close range. He stated that an hour or two after being shot somebody had very graciously given him a bottle of laudanum, and he had taken the entire bottle—probably an ounce. That very firmly splinted his bowel. He was not having any signs of peritoniti when he arrived, therefore, we continued the watchful waiting that was being ob-

served at that time. He recovered. He passed quite a number of the shot through the bowel at different times, showing that the intestine had been perforated and the shot came through and dropped into the lumen of the bowel and were expelled that way. That case certainly furnishes some food for thought. I feel that under certain circumstances conservatism is to be followed in some of these cases. I am not here to preach that gospel, however, but I think when the cases come early enough they should be given proper attention.

I must differ from the doctor who preceded me in the statement that we are ever warranted, in repair of perforation of the intestine, in closing the wound without instituting drainage. I may be old-fashioned, but I have been running a little hospital for 31 years and have seen quite a number of these cases in which drainage was instituted, and to this hour I have never regretted having followed that dictum in any case. I have no patience with the modern trend that says "Do not put in a drain and the patient will come out all right." Certainly here is a place where drainage is always indicated.

These cases as a rule suffer a great deal of distress from gas in the intestines, and repair of the intestine is often jeopardized because of distention of the bowel with gas. Bear in mind that it is entirely right and proper to place a small tube, in other words, do an enterostomy, in any case where there has been extensive soiling of the peritoneal cavity. If it is practical and the perforation is located in a satisfactory position, there is no objection to inserting a small tube through that perforation, thereby relieving the distress that is suffered in most of these cases. That I think is always in order.

TREATMENT OF LESIONS OF THE CERVIX.*

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Before discussing directly the subject of this paper it is probably well to review briefly the anatomy of the cervix. The cervix uteri is the lower portion of the uterus; it is more or less cylindrical in shape and about one inch in length. Its inferior end, tapering somewhat, enters the upper part of the vagina and is attached to the margin of the opening of the vaginal wall through which it

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passes. The vaginal opening is called the external os, through which the cavity of the uterus communicates with the vagina. The front portion of the cervix which is thicker and slightly more rounded is called the anterior lip. The posterior portion, somewhat thinner and a little higher, is called the posterior lip. The mucous coat of the entire uterine cavity is covered with columnar ciliated epithelium dotted with simple tubular glands, which are also lined with epithelium, penetrating into the muscular coat. The cervical surface is not smooth but presents a number of peculiar disposed ridges called the plicae palmata and in addition to the unbranched tubular glands there are numerous branch glands.

The difference of the histological anatomy between the endocervix and the endometrium proper, together with the location and position of the cervix, accounts for the cervix being more predisposed to disease than the body of the uterus. There is probably no organ in the body afforded less protection than the external os. The numerous folds in the endocervix constitute a favorable soil for organisms. Furthermore, the deeply penetrating racemose glands do not rid themselves of infected material as readily as do the tubular glands of the endometrium. Any irritation of these glands produces a continuous hypersecretion into the canal, and frequently the inflamed process causes a closure of the ducts and retention cysts or small abscesses result. Also, the internal os normally acts as an efficient barrier to all organisms except the gonococci.

Lesions of the cervix are brought about in many ways. First of all, the gonococcus infection attacks the cervix primarily and is one of the few infections that extends beyond the internal os and even this infection is carried to other parts of the female genital organs and the endometrium is largely spared. The cervix is the first to become infected and is the last to be cured. The infection becomes more or less chronic and is invariably a mixed one, the staphylococci and streptococci predominating.

The invasion of organisms may be the result of direct infection as for example, the gonococcal infection which we have already mentioned, or some indirect infections following injuries to the cervix, such as laceration accompanying child birth and abortions, instrumentation, or from the upward spread from diseases or inflammation of the vulva, or from the use of vaginal pessaries and too frequent use of vaginal douches. All these causes produce at first an acute cervicitis followed, as a rule, by chronic conditions. It is the treatment of the latter that we wish to deal with especially, in this paper.

I might say in passing that it has been found by Fulkerson, Burns and others who have examined a large number of women, that approximately 33 1/3 per cent had chronic cervicitis in some form and that more than 75 per cent of these conditions occurred between the ages of 20 and 40 years.

We have then presenting for examination in chronic cervical troubles, first, lesions giving the appearance of small erosions or ulcerations but which in reality are denuded surfaces covered with epithelium; second, the eversion of the mucous membrane, obstruction of the glands of the cervix as mentioned above and unilateral, bilateral and stellate lacerations and not infrequently hyperplasia of the cervix which greatly increases its size. The diagnosis of the various lesions can easily be made on inspection except where the tissue is friable, bleeds freely and is easily broken down, in which event a test excision should be made and the excised tissue subjected to a microscopical examination.

The subject of my paper is treatment of these lesions and I shall confine myself to the treatment of the sub-acute or chronic conditions, nearly all of which should be treated either with the thermo-cautery or some form of trachelorrhaphy or excisions ranging from a very simple one to complete amputation of the cervix.

Going back to the anatomy of the cervix we must remember that a good portion of

the glands of the cervix are racemose in character and when infected it is usually necessary to destroy them either by the thermo-cautery or by excision.

In the smaller erosions and lesser lacerations where no malignancy is present, we would recommend, first blocking the cervix with novocain by injections high up, then the cervix is dilated with graduated sounds and with a nasal cautery tip, longitudinal lines from the internal to the external os are made about 4 or 5 mm. in depth around the circumference of the cervix, being sure that all the Nabothian ovules are punctured. As a rule only one to four treatments of this kind is necessary to cure a great many of the lesions.

Where we have a condition or laceration too extensive for the thermo-cautery to remedy, it becomes necessary to do one of the several trachelo-plastic operations recommended by various operators.

The one advocated by Sturmdorf is to be recommended for lacerations associated with endocervicitis, and is especially recommended for women during the child bearing period, as this procedure, when properly carried out, allows the woman in the reproductive age to deliver herself spontaneously. This operation is done by coning out the cervix from the external to the internal os, removing only the cervical mucosa and infected glands, the vaginal mucosa being brought down over the muscular layer and attached to the cervical mucosa by specially devised sutures.

In the more extensive bilateral lacerations the Schroder operation is another one recommended, where we desire to save as much of the cervix as possible. This is done by widely separating the lips of the cervix and an incision is carried half through the cervix encircling the opening of the canal at the summit of the laceration. Below this incision the inner surface of each lip is removed to the junction of the vaginal and cervical mucous membrane at the site of the original os. The mucosa of the cervix is united to that of the vagina and the raw surface of each side sutured.

For the still more extensive lacerations and hyperplasia of the cervix amputation of the cervix is the procedure of choice which is done by splitting the cervix into an interior and posterior lip and removing each lip with a double flap. This is commonly known as the Montgomery operation.

In all these operations it is of the utmost importance to suture the cervical mucosa to the vaginal mucosa to prevent entire closure of the opening by adhesions.

Another benign condition of the cervix which is usually preceded by an endocervicitis is cervical polyp. This condition produces uterine bleeding and is easily diagnosed by inspection and palpation and occasionally has a tendency to become malignant. The treatment of course, is removal by amputating the pedicle or occasionally by high cervical amputation.

I have not attempted in this paper to give any treatment of cervical malignancies as this is a broad subject within itself. I shall, however, again emphasize the great importance of careful examination of the cervix by inspection and where there is the least suspicion of a malignant condition, a section should be made, preferably with a cautery, and the excised portion examined by a pathologist.

The medical profession has known and taught the public for many years the dangers of allowing infected tonsils to remain in any individual, and so well is the public generally educated to this fact that it is no longer necessary to insist on this form of focal infection being removed. But I am fearful that we have overlooked, to a certain extent, the importance of careful examination of the female genital organs and seeing to it that infected cervixes, which are classified by some as the pelvic tonsils, are treated properly and this very frequent seat of focal infection remedied, and should a malignancy be present the necessary treatment given while the condition is curable.

I should like to again call your attention to the fact that in all probability one-third of the women of the child-bearing period

are suffering with some lesions of the cervix producing the aggravating symptoms of leukorrhea accompanied by lumbosacral backache, occasionally menorrhagia or metorrhagia, constipation and frequently systemic symptoms will occur and vary in intensity with the extent of the disease. So it appears to us that there is no greater field for more careful examination and administering the proper treatment for the relief of these very common conditions, especially since a great number of them can be cured in any physician's office.

DISCUSSION

Dr. M. L. Flynt (Newton): Dr. Philpot has brought us a very interesting and timely paper.

One of the most prevalent conditions that confronts us today—not only the gynecologist but the general surgeon and the general practitioner as well—is lesions of the cervix. We see them almost every day if we do our duty and examine our patients as we should.

The infection, as Dr. Philpot has told us, originates in the racemose glands of the cervix and ultimately terminates in Nabothian cysts, the enlargement of the cervix depending upon the number of cysts formed. Many cases start in infancy, caused by diarrhea and the vulva being constantly plastered with foul fecal matter. In young girls of school age it may come from using unsanitary toilets and institutional public bath tubs.

The most frequent cause in adult life is laceration of the cervix. A torn cervix is always considered a diseased cervix, producing leukorrhea, the commonest disease known to womanhood, which condition is often kept active by the constant use of irritating chemical douches and the dirty douche pipe, or the dirty doctor's probe in the office of examination.

It is said that 40 per cent of primipara have lacerated cervixes caused by expulsion of the fetus, the use of forceps, or manual or surgical dilatation. These lacerations should always be repaired, irrespective of the age of the patient or future pregnancy, as a prophylactic measure.

As to treatment, the cautery is applicable in about 80 per cent of cases. Curettage is unscientific and positively harmful.

Chronic endocervicitis, when accompanied by extensive tears of the cervix, is best treated by proper surgical procedure, the only method that promises a cure. The Sturmdorf operation is the operation of choice.

In examination and treatment of lesions of the cervix we should always be on the lookout for malignancy, and a biopsy should be made in all suspicious cases. I have had three cases of can-

cer of the cervix within the past few weeks that came to me for other conditions.

Dr. R. L. Sanders (Memphis): Your Chairman struck a worthwhile note when he said we are now in the throes of preventive surgery. I think if this meeting should close at this time, with this discussion of lesions of the cervix uteri, it would be well worth while. No subject is more important than that of the troublesome cervix, and the early recognition of the things Dr. Philpot has talked about are certainly in the line of preventive surgery.

As Dr. Darrington said, mechanical aids have been valuable in teaching us something about the upper urinary tract. The urologists have reason to be proud of their accomplishments. They are now able to see what is going on in the genitourinary tract. Although we may not know more about the cause of the pathologic condition, we can see it and know what to do for it. The same thing is true of the cervix. Sims, when he took a long-handled spoon and put it in the vagina, pulling it down so he could see, went a long way toward solving the problem of treatment of the cervix uteri. Since then we have learned much about what to do: the possibilities and the dangers. I believe that is the secret of our treatment of the cervix; namely, a proper visualization. We must get acquainted with it, and a good speculum (the Graves' type, especially) properly placed in the vagina, with the patient in the suitable position on the table, and with an electric light for illumination, enables us to say, "All right, cervix, I am looking at you, and what do I see?" I always ask myself that question when looking into the vagina.

After we have seen several thousand normal cervixes, we begin to recognize the abnormal ones. In the abnormal ones what are we likely to see? First, cervicitis, probably accompanied by endocervicitis. The racemose glands harbor infection and tend to keep it active, producing erosions and ulceration. Next, Nabothian cysts. These are simply retention cysts, an evidence of infection in the racemose glands. Perhaps they harbor infection, although many of them do not give local symptoms. There may be a few cysts that might be lacerations of the types named by the essayist. Or there may be a chancre present, or, finally, cancer. These are the things we commonly see in the cervix under proper vision.

After a careful visualization to determine the condition present, the most important point is a decision as to the best remedy for a benign condition of the cervix to prevent surgery and to forestall cancer. I believe the Doctor has answered the question. For simple erosion, cervicitis and endocervicitis, and eliminating the acute

conditions. there is nothing so advantageous as the simple application of the cautery. In my experience with this treatment, such lesions will get well and stay well. If there are lacerations, they should be repaired fairly early, not waiting until the child-bearing period is past. In my experience, irreparable damage is done in many cases by such a long wait. Much of the "backwash" of obstetrics is seen by the gynecologist and general surgeon, and I believe laceration of the cervix is one of the most common conditions found. Amputation of the cervix is often necessary to effect a cure.

Finally, let me urge that we get acquainted with the cervix. It is surprising how often this is not done. A short time ago a woman came to my office for examination and I used the speculum with a light attached. I told her she should see her physician. She came back later, saying, "I want you to look at me again." I asked her why she had not gone to her own physician, and she said he had no light. It is astonishing how frequently we do not get acquainted with the cervix by using proper illumination.

Dr. V. B. Philpot (closing): I wish to thank Dr. Flynt and Dr. Sanders for their full discussion of this paper.

I noticed in Graves' report of 5,000 repair operations on the cervix collected by him which had been followed up, there were only four cases of malignancy following and in two of these, the repairs were not done properly, which shows that proper repairs of a lacerated cervix is the greatest preventive treatment of cancer of this organ.

Speaking of early operation for repair, I do not believe that it is generally conceded very good surgery to attempt to repair a cervix immediately after it is torn following labor. I would rather wait a few months until contraction and retraction has taken place, and then if the laceration is not too large, or accompanied by some serious infection, it may not be necessary, as the repair may take place naturally. The larger tears will, of course, need repairing or treating as indicated.

RECENT NASAL FRACTURES.*

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GULFPORT, MISS.

For some reason injuries to the nose have not received the attention that their importance deserves. This may be due to the fact that injury to the nose itself seldom threatens the life of the patient and con-

sequently both he and the doctor treat these injuries lightly.

The nose is the organ of olfaction and also the organ vitally concerned in the inhalation and exhalation of air and, therefore, is of vital importance to our health. The nose on account of its prominent place on the face assumes importance from the esthetic standpoint and any marked deviation from the normal is certain to cause undue attention with resultant mental and physical discomfort. Four bones and seven cartilages form the framework of the nose. The two nasal bones, vomer and perpendicular plate of the ethmoid are the bones, and the cartilages are the upper and lower lateral, sesmoid and triangular.

The two nasal bones articulate with each other at their anterior borders, forming the crest of the arch; at their posterior borders with the superior maxillary and at their top with the frontal bone. The force which crushes the arch drives them (the nasal bones) backward, breaking their articulations and forcing their margins past the margins of the maxillary and frontal bones. The septum forced backward is deflected into an S-shaped curve. Although these movements break the joints of the nasal bones they do not leave them loose, for in their new position they are wedged between the osseous structures on both sides and above. For this reason we often have an impacted fracture.

Quite a number of nasal deformities follow nasal fractures when not properly treated but the two most important types are the twisted and sunken noses. The twisted type is strikingly brought out in patients under study when an imaginary line is drawn from the center of the forehead (glabella), down to the center of the philtrum so that any displacement of the nose to one side or the other will be easily seen. The sunken nose resembles the so-called syphilitic deformity.

Practically all fractures of the nose are of the compound type and this point must be kept in mind during the treatment even though there is little loss of blood from the

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nares. The marked vascularity of the supporting and lining structures of the nose doubtless confers a local immunity to infection.

Early swelling which follows any injury to the nose tends to mask the bony deformity and is often assumed to be the only injury present. If unable to make a diagnosis, make repeated daily examinations.

Nasal fractures may become dangerous to life as when a fracture occurs through the cribriform plate. In cribriform plate fracture an escape of cerebral fluid may be noted.

Because of the elasticity and mobility of the nasal structure it usually takes a great amount of force to cause a fracture of this organ. In practically all injuries of the nose with external direct force to the osseous bridge there is a tendency of the nasal bones to separate from each other. There is practically no obliteration of the central suture in the white race while bony union is frequently seen in the negro. This tendency to separation is responsible for the great frequency of dislocation of the nasal bones. The most common injury involves separation of the nasal bones at the central suture and their fracture.

It is well to get an exact description of the method of injury and to know the exact area upon which the direct violence had landed. The origin of nose bleed when a history of nasal injury is given should be carefully sought so that a fracture within the nasal structure, as of the septum, may be located and future nasal obstruction obviated.

Probably the most common complication resulting from fracture of the nose is a septal hematoma which may lead to abscess formation. Frequent intranasal examinations will reveal the presence of a hematoma as it may not be present when the case is first seen. Crepitus may be absent even though a fracture exists when impaction has occurred. Gentle pressure, just barely touching it with the index finger of one hand will often localize the crepitus. Emphysema may be present.

Roentgen ray examination is of value as an aid in the diagnosis of fractures of the nasal bones in adults, however, the roentgen ray is of little value in the case of a child.

The diagnosis of fracture of the nose is more difficult in the child than in the adult. A positive conclusion in some children can be reached only after a most careful examination. A general anesthetic may be necessary at times. Sometimes little can be gained by inspection unless the patient is seen immediately after the injury for the swelling masks the extent of the injury and we may have to wait until this has subsided. In injuries to the nose bony fixation occurs in the adult in about twenty days after the accident.

If the patient is seen immediately after the accident and if there is only moderate subcutaneous hemorrhage and swelling it is possible to line up the parts in their proper position. However, if there is very much swelling and bleeding I have found it better to wait until the swelling subsides before attempting to adjust the fractured and dislocated nasal bones. Hot and cold applications will assist in reducing the swelling so that reduction may be made at as early a date as possible. As a rule the swelling subsides in five to seven days and reduction of the fracture can be made then.

Hemorrhage is stopped by the use of local application of adrenalin chlorid intranasally and ice externally. Until this is accomplished it is very difficult to make a satisfactory intranasal inspection. A head mirror and nasal speculum or one of the electric lighted nasal specula will be indispensable in this examination. Look for a deviation of the septum and whether a hematoma has formed. If there is a bilateral fluctuating swelling of the septum it is a hematoma which will later abscess if not evacuated.

Often satisfactory reduction may be made with the use of a local anesthetic but there are times when a general anesthetic is best. Good anesthesia can be obtained

by packing the nose with a 10 per cent solution of cocain and solution of adrenalin chlorid, equal parts, being careful to squeeze out excess solution before packing and leaving packing in for 15 or 20 minutes. Personally, I prefer the so-called cocaine mud method of producing local anesthesia but would not recommend its use by the general practitioner.

Reduction is accomplished by manipulation both inside and outside the nasal chambers. There are many good special forceps on the market such as the Adams, but for all general purposes an ordinary pair of flat surgical scissors about 6 inches long serve the purpose very well indeed. Cotton is wrapped around the blades and covered with vaseline, with this the bridge of the nose may be lifted and fractures and dislocations easily reduced. The triangular cartilage, if fractured or dislocated, should be placed in its proper position. In fact it is far more important for the patient's future health to have the septum straightened than to have the external deformity corrected.

Nasal fractures generally remain in place after reduction without the use of any complicated fixation appliances. If the case is a simple nasal fracture, such as we see in football players, intranasal packing is very seldom required. If a hematoma has occurred an incision should be made and all blood removed. It will be necessary to pack both sides of the septum to prevent a recurrence of the hematoma.

Remove any protruding loose spicules of bone and suture the skin so as to leave a small scar. Where the nasal bones and nasal processes of the maxillary and frontal bones are broken in several pieces it is necessary to use intranasal packing. This packing should not be too large as the subsequent swelling of the intranasal tissues may overcorrect the fracture. It is sometimes advisable when one nasal bone is fractured and the other shows a green stick fracture to complete that fracture, place parts in correct position by intranasal

packing and then apply an external splint. The best one is made of copper or galvanized iron covered with adhesive padded with cotton and retained in proper position by adhesive plaster. The intranasal packing should be removed in two days and replaced if necessary. The splint is removed every two days and inspected. It is advisable to keep splint on the nose for ten days or more to prevent patient from accidentally disturbing the nose in sleep or otherwise.

Tetanus antitoxin is given when the injury is such that its administration is indicated.

When treating fracture of the nose, especially with a view of preventing deformity, remember the bones are placed directly under the skin and the least irregularity shows up very plainly.

Nasal fractures should receive more attention from the general practitioner and surgeon who treat the vast majority of these cases. Every case should have an intranasal examination after shrinking the tissues. Repeated examinations should be made as the swelling subsides so as not to overlook any slight fracture or dislocation.

DISCUSSION

Dr. D. C. Montgomery (Greenville): I think this is a very appropriate paper to be brought before a general meeting, because of the fact that the general practitioners frequently see these cases first, and usually treat them. So it is well to know that deformities of the nose should be carefully looked after.

As Dr. McWilliams has said, fractures of the nose have not been given the attention they deserve. It seems rather strange that injuries to this important organ should be held so lightly and so carelessly treated when we realize that facial disfigurement may mean a great deal to the patient in the pursuit of a livelihood, as well as a distinct source of embarrassment in his social activities. To a sensitive patient this may mean a great deal, as is proven by the many operations performed today for cosmetic reasons.

Secondly, a great deal of harm can be done to the patient from a lack of ventilation of the nasal passages and sinuses, predisposing them to infection, not to speak of the discomfort from a stopped-up nose due to an unreduced fracture followed by obstruction.

Third, failure to observe and treat a hematoma of the septum usually results in an abscess, with loss of cartilaginous tissue and consequent dropping of the bridge of the nose, which necessitates an operation with transplantation of a piece of cartilage or bone to reconstruct and elevate the bridge again, all of which could have been avoided with early recognition and incision of the hematoma in its beginning.

When we consider the advances made in the treatment of fractures elsewhere, the time and attention expended in order to restore normal function and contour if possible, one is amazed at the indifference of the physicians as a whole to these rather frequent fractures.

I would urge that all of us be more careful in the examination of these injured noses, especially the intranasal examination, and see that reduction of the fracture is done at the earliest possible moment, to prevent future deformity.

Dr. L. S. Gaudet (Natchez): With our speedy means of transportation the nose and face assume great importance. Neither of the gentlemen said anything about the treatment of this condition, and I feel something should be said in regard to this because it is of great importance to the general practitioner, as well as diagnosis. An early diagnosis is by far the best. By that I mean to say that wherever the practitioner can see a nasal fracture within a few hours after the accident, very much better results can be obtained than by waiting and doing any manipulations to correct the deformity later.

In regard to the treatment, Dr. McWilliams brought out a very important point, a very simple way of correcting nasal deformity with a pair of scissors. That is very simple and within the reach of each and every general practitioner. For my own use I prefer the Nash forceps covered with rubber and have obtained good results with that. In my practice I have found that splints of any kind, whether extra or intranasal, especially metal splints, do not give the results we expect. Where we get these cases early enough, a light pack on the inside gives good results, provided it is changed often enough. For an external splint I have found nothing better than dental compound, making a molded splint and leaving it on for 24 to 48 hours after the injury, using with this ice packs.

In almost every instance these cases should be institutional patients. We not only can handle them much better, but the patient gets better results.

As I said before, most of these cases of nasal injury come within the scope of the general practitioner and are easy enough to correct. With the treatment that has been outlined I think we

should get much better results than at the present time.

CARCINOMA OF THE LARYNX WITH LARYNGECTOMY*

CASE REPORT

RAYMOND T. SMITH, M. D.

NATCHEZ, MISS.

The subject of carcinoma of the larynx ought to be one which we keep constantly before us because it offers, from the standpoint of occurrence, accessibility, total extirpation, prognosis, and the undying gratitude of the patient, the most constant and gratifying results of relief from horrible death. Nowhere else in the body, unless it be on the skin, can we truly remove the neoplastic growths as completely as it is possible when the condition is intrinsic carcinoma of the larynx. There is no place in the body where the disease manifests itself as early as it does in the larynx. It is a localized condition and when it originates on a vocal cord it remains for an exceptionally long time outside the danger zone. It is slow in evolution, and the clinical evidence can be weighed and a differential diagnosis studied. When the diagnosis has been made either by an analysis of the history, physical findings in the appearance of the new growth, or by a biopsy, then is the time to operate. As the immortal John B. Murphy said about appendicitis, "When you have made a diagnosis of appendicitis, then is the time to operate." I will take up later the types and indications for different operations.

Carcinoma may be either intrinsic, extrinsic or mixed. Jackson mentions intrinsic carcinoma as being localized to one vocal cord with the more or less uncommon sites as the exception, such as, the ventricle of Morgagni or the subglottic area. Naturally, for the accurate classification of intrinsic carcinoma the line must be

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sharply drawn. There certainly must be no cervical adenopathy or evidence of metastasis elsewhere. MacKenty, in enumerating the sites of origin of the extrinsic carcinoma of the larynx, cites:

1. At the base of the epiglottis.
2. Between the base of the epiglottis and the anterior commissure.
3. On one or the other arytenoid.
4. On one aryepiglottic fold.
5. On the posterior (pharyngeal) surface of the cricoid.
6. When the two true vocal cords are involved.

Jackson defines the mixed group as being made up either of intrinsic cancer which has spread beyond the glottic margin, or extrinsic cases which have extended into the cavity of the larynx.

Little is known as yet as to the etiology of laryngeal carcinoma. The usual number of so-called theories prevail but no foundation for them can be verified. Therefore I will confine myself to the accessory influences, namely age and sex.

While laryngeal cancer is more frequently found in the later stages of life it is not confined to that stage entirely. Jackson reports his youngest case in a young man aged 23 years; Chiari reports its presence in a girl sixteen years of age; MacKenty's cases were 26 years of age. The oldest patients reported operated on with no recurrences were 80 years of age. According to sex: 1. Intrinsic cancer of the larynx is much more commonly found in the male. 2. Extrinsic cancer is found less frequently in women except at one site which according to Jackson is the posterior (pharyngeal) surface of the cricoid. 3. Post cricoid cancer is relatively more common in females. It usually occurs earlier in life in the female than other malignancies in the sinus pyriformis in the male.

I will now briefly take up some of the outstanding symptoms. The only constant, never failing symptom in intrinsic cancer is hoarseness. This symptom without a careful laryngoscopic examination may be passed up, but to the careful laryngologist

it is the red flag of danger. So many of you who have large practices are prone to pass by lightly the fact that after the patient has had a "sore throat," or a "cold," or an attack of "flu," to treat the condition as a laryngitis temporarily and advise the patient to return should the hoarseness not improve. I well remember a case in Chicago which I had the honor to see in which the patient had gone from one doctor to another for several years and was diagnosed anything from bronchitis, chronic laryngitis to chronic tonsillitis only to prove on examination to be carcinoma of the larynx. But the sad part of it is that these patients think you are correct in your diagnosis and put off returning to you and then months later when some change in the condition is apparent to the patient the disease is past the intrinsic stage.

The hoarseness is variable, usually worse in the morning after a night spent in a poorly ventilated room. This hoarseness sometimes gets better with rest, good air and proper food. All these things tend to fool the patient and keep him from returning to the doctor for months. I want to lay special emphasis on this one symptom because when it is disregarded or overlooked you are doing the patient a great injustice. If cancer is to be conquered, then we must practice more care in judging the seemingly unimportant symptoms of the disease. When cough, dyspnea, dysphagia, asthenia, loss of weight, hoarseness, etc., are present the game is already lost in ninety-nine per cent of the cases. If I can impress upon you gentlemen the necessity of sending any case of hoarseness, of not less than three or four weeks duration, to a competent laryngologist who realizes the importance of this one symptom so that the mortality of cancer of the larynx may be lessened, then I will feel that perhaps this paper has not been written in vain. Since the laity and even sometimes the family physician are prone to look upon hoarseness as not important, a most careful cross-examination of the patient has to be made because the patient may say that

the condition has only been present for "a month or two" but often after reconsidering say it may have been present for a year or more. The other symptoms are of no benefit to an early diagnosis.

We are all more or less familiar with the physical findings in the larynx and so I will just mention them briefly. The disease may manifest itself on the cord in any of the following forms:

1. A projecting or semi-pedunculated growth resembling a simple papilloma.
2. A superficial but limited infiltration which, later on, may ulcerate or fungate.
3. As an embedded infiltration.

Some of the earlier writers state that **impaired mobility or fixation** of the cord are to be considered, but we look upon that nowadays as being a late finding. According to Haslinger, fixation of the cord may be early. It may also occur late in lues or with a tuberculosis deposit.

DIAGNOSIS

The diagnosis to the qualified laryngologist is comparatively simple providing the following routine is carried out.

1. A most thorough and complete history including:
 - a. Present complaint.
 - b. Past illnesses.
 - c. Habits—including occupation.
 - d. Family history—with special reference to cancer.
2. A physical examination to include:
 - a. A complete general examination.
 - b. A careful local examination both by indirect and direct laryngoscopy.
 - c. A detailed laboratory examination.
 - d. A biopsy with reports from two different laboratories.

DIFFERENTIAL DIAGNOSIS

With the exception of Osler's classical triad of lues, carcinoma and tuberculosis there is very little difficulty experienced in differentiation by merely examining the larynx. A few of the principal points in the differential diagnosis will now be given:

1. A positive Wassermann while not conclusive will sometimes help to differentiate, however, it must be remembered that a carcinomatous condition can also be present. It must be backed by clinical and morphological evidence.

2. In lues pain and discomfort are usually totally absent throughout the course of the disease even after tumor formation and ulceration are present.

3. In tuberculosis pain and discomfort are very early symptoms and are usually more severe than in the later stages of cancer.

4. In cancer pain is absent until ulceration and secondary infections set in.

5. Tenderness over the larynx may exist in tuberculosis but is rare in incipient carcinoma and is never found in lues.

6. A careful history and physical ranks paramount in the differential diagnosis.

7. Roentgen ray of the chest showing involvement should not blind us to the fact that cancer can be also present with a tuberculous lesion.

8. Cough—First in tuberculosis, absent in cancer, not important in lues.

9. The appearance of the different lesions.

10. The location of the lesions.

PATHOLOGY

1. Malignant disease of the larynx gives us from two to three per cent of all malignant tumors.

2. Sixteen per cent of all laryngeal tumors are malignant.

TYPES OF MALIGNANCIES WITH PERCENTAGE OF FREQUENCY

1. Ninety-six per cent arise from the stratified surface mucous membranes of the larynx and consist chiefly of squamous cells which form typical squamous cell epithelium.

2. Two per cent of epithelioma of the larynx are basal celled tumors.

3. One per cent of carcinomas of the larynx are papillary carcinomas.

4. About one per cent come from the mucous glands in the larynx known as adenocarcinomas.

LARYNGECTOMY

The first attempt at surgical cure of cancer of the larynx was credited to Ehrmann in 1844. There were no cures reported until 1876 following this. Statistics are very inadequate and inaccurate owing to the difference of opinion as to what constitutes a cure. The most reliable of these statistics come from Bergmann, Kocher, Mikulicz, Butlin, Schmieglow, Fischer, Thomson, Semmon, Jackson, Lewis, Moure and others, these reporting only a small per cent of the total cases reported.

The types of operations:

1. Intralaryngeal extirpation tried by a limited number only causes it to be condemned. Even in doing a biopsy the major operation should follow as soon as diagnosis has been confirmed owing to the characteristic of neoplastic growths which have a tendency to spread following surgical interference.

2. Thyrotomy or laryngofissure was first accurately reported by Gordon Buck in 1855. However, the reports are conflicting as to the number of cures by this method. Gordon New of Rochester recently reported sixty cases of early carcinoma cured by laryngofissure.

3. Hemilaryngectomy was first performed by Maas of Breslau in 1876. Later some others tried it but all with about the same results with regard to recurrences.

4. Total laryngectomy. I consider this operation the only one to employ because in spite of the loss of voice, tissue, morale, etc., of the patient, the chances for recurrence are so much less that nothing else matters. The first total laryngectomy was reported by Watson of Edinburgh in 1886, for lues. In 1881 Gluck devised the two-stage operation on account of the danger of aspiration pneumonia and neck infection.

5. I want to mention at this point the use of radium in this type of cancer. We all know that radium causes the formation of fibrous tissue with increased blood supply. We also know that this type of tumor is highly malignant due to the high per-

centage of squamous cells present. It has been found that in using radium the following resulted:

- A. A marked advance in the disease process.
- B. Even though the surface appearance of the disease improves the underlying parts are extending towards the cervical lymphatics.
- C. If a massive dose is given or the seeds are planted there is no telling how extensive the necrosis will be.

MacKenty cites a case of radium implantation in a case of incipient cancer in which the entire interior of the larynx necrosed followed by a virulent general and local septic reaction with temperature 103°F. daily. The patient lost 102 pounds in weight. The larynx was removed four months later and the findings at operation were of sepsis and a shapeless mass with a fetid abscess in the center. On examination of the wall of the abscess typical cancer areas were found. Patient made a complete recovery and is free from recurrence after eight years.

I will now take up the preparation of the patient for total laryngectomy with special reference to the two-stage operation of Gluck which I performed on the patient I am going to show you.

The patient is admitted to the hospital four to five days prior to the tracheotomy. He is submitted to a most careful general examination including:

1. Heart.
2. Lungs.
3. Head: Teeth, tonsils, sinuses, ears, including mastoids and eustachian tubes.
4. Basal metabolism.
 - a. Blood chemistry.
 - b. Wassermann.
 - c. Blood pressure.
5. Routine laboratory examination.

Next let us take up the preparation of the patient for operation.

1. The patient is allowed to be up and about prior to the tracheotomy.

2. Digitalis is given for four or five days.
3. High colonic flushes are given every other day.
4. The diet is restricted.
5. All diseased teeth are pulled and the mouth is cleansed every day with antiseptic washes.
6. The day before tracheotomy the duodenal tube is inserted and left in place for three meals.
7. Sodium amytal, 3 grs., are given at bedtime the night before operation.
8. Nothing that will subdue the cough reflex is given prior to operation.
9. The most efficient nurses are secured, preferably those who have had previous training.

The usual tracheotomy is made after the field has been desensitized with novocaine, one per cent. The tissues are separated and the thyroid isthmus is clamped and divided. All bleeding points are controlled before proceeding further. The upper trachea, cricoid and lateral walls of the larynx are fully dissected free. The tracheotomy opening is made between the first and second rings. The sides of the wound are packed with iodoform gauze. A sponge moistened with bichloride of mercury solution 1:100,000 is placed over the tracheal cannula and kept moist at all times. The air in the room is kept moist with sodium bicarbonate solution heated on a hot plate.

Proctoclysis of glucose and soda is started and continued for twenty-four hours when the patient is allowed a liquid diet.

The patient is encouraged to sit up in bed and after thirty-six hours is allowed to sit in a chair.

From five to seven days later the second stage of the operation is completed. The object in the two-stage operation is to allow nature to wall off the operative field laterally and below to prevent the post-operative complications of mediastinal and cervical infections.

OPERATIVE TECHNIC

Some men advise a combination of local and general anesthesia but I feel that it

largely depends on the individual patient. I have observed no ill effects in my last two cases in the way of shock or nervousness. A good suction pump must be in use at all times during the operation because the inspiration of blood during or after the operation forebodes serious complications since the blood acts as a foreign body in the lung which cannot be expelled by coughing after the larynx has been removed.

After a careful and thorough injection of the tissues the incision is extended upward well above the glottis and a cross incision is made forming the letter T. The dissection of the larynx is continued until entirely free laterally. The trachea is severed and one must remember that only a thin layer of loose connective tissue separates the larynx from the esophagus. Great care must be exercised to prevent perforation of the anterior esophageal wall which would cause serious complications. This dissection is carried to a point just beyond the arytenoids depending on the extent of the neoplasm. At this point the opening is made into the hypopharynx. After a careful inspection of the organ the larynx is severed by cutting as close as possible to the border of the thyroid cartilage. Just before the last suture is tied in the hypopharynx a duodenal tube is inserted. The wound is then closed. A large rubber tracheal tube as designed by Dr. MacKenty is placed in the tracheal opening and held in place by two silkworm sutures pulling the tracheal rings up as close as possible to the skin. The remainder of the wound is packed with iodoform gauze with cigarette drain tubes at the top and lower corners of the wound.

In the after treatment I will only take up such features as are peculiar to this operation.

1. The drains are left in from five to seven days.

2. Tracheitis usually follows this operation and it must be unloaded by means of suction in order to prevent gravitation pneumonia.

3. All feeding is done through the duodenal tube. For the first two days from one-half to two-thirds of the caloric requirements is given and then the amount should be increased up to full requirements. Be sure to cleanse the tube with water after each feeding.

4. Dressings except the packs and drainage tubes are changed as often as needed.

5. The patient is encouraged to sit up in bed and on the second day to the fourth day allowed to sit up in a chair. This is especially important in advanced old age.

6. The colon is kept free by irrigations. The usual purgative given through the tube on the fourth to the seventh day.

7. After approximately two weeks or after the hypopharyngeal wound is closed the patient is allowed to swallow food naturally. If there should be any evidence of leaking the duodenal tube should be replaced.

COMPLICATIONS

1. There may be a reduction in the pulse and respiration.

2. Hiccough may occur but it is easily controlled by tongue traction or morphine.

3. Hemorrhage may be either primary or secondary. Primary hemorrhage is doubtless due to carelessness. Secondary hemorrhage is an indication of a septic invasion and may appear during the sloughing or the granulating period.

4. Pneumogastric nerve block is rare and is caused by:

a. Injection of procaine into the carotid sheath.

b. By extension of the infection into that region.

5. General sepsis while rare does occur if you are not careful in the matter of drainage, in the selection of cases, or if pus becomes bottled up in the wound.

6. Mediastinitis due to downward extension of the infection fortunately is rare where care has been taken and the two-stage operation performed. This condition is extremely rapid and does not last long enough to form an abscess.

7. Shock is rarer still. Patients usu-

ally leave the operating room with very little change in the general condition.

8. Tracheitis is quite common following this operation and may be either:

a. Dry.

b. Wet.

The main trouble being that casts form at the bifurcation and thereby obstruct respiration and have to be removed either by suction or the bronchoscope.

9. Pneumonia—usually bronchial but occasionally lobar, is the greatest bug-bear to this operation. With proper post-operative management this hazard can be reduced to a minimum.

10. Excess sloughing and tissue destruction in a few cases may be a source of considerable trouble from a cosmetic standpoint, but on the other hand it may be a blessing in disguise.

11. Hypopharyngeal fistula is rather common but will either close by healing or by plastic repair.

I want to say a word here about the voice following this operation. There are two types of voice possible:

1. The esophageal—which is formed by the swallowing of air into the stomach and then by controlled release of the air into the hypopharynx guttural sounds are produced.

In the October issue of the Archives of Otolaryngology, Dr. W. Wallace Morrison gives us the technique of speech in cases following total laryngectomy.

2. The artificial voice is produced by the artificial larynx. This instrument designed by MacKenty with the engineers of the Western Electric Corporation fills a place not only where the larynx has been removed but also in paralysis and dysfunction of the larynx.

And now in conclusion I would like to sum up with these remarks:

1. That a most painstaking and careful history must be obtained.

2. That a thorough general and local examination must be done in order to select cases.

3. That in any intrinsic carcinoma of

the larynx total laryngectomy is the operation of choice.

4. That in early cases confined to one cord without fixation that laryngofissure may be done with success.

5. That radium and deep roentgen ray therapy are contraindicated in malignant disease of the larynx.

6. That the patients should be strongly encouraged to depend on their esophageal voice in order to prevent depression psychoses.

CASE REPORT

The patient you gentlemen see before you was admitted to the Chamberlain-Rice Hospital on September 22, 1931, for laryngectomy following a laboratory diagnosis from two different laboratories of carcinoma of the larynx. His admission history was as follows:

Admission History: He stated on admission that he had suffered for years with hoarseness and loss of weight and strength. He was unable to get his breath normally. He also stated that he had had a previous operation on his larynx one year before when a large growth was removed. He had been coming back to the hospital at different times for examination of his larynx. He was here now to have his larynx removed.

Admission Diagnosis: Carcinoma of the larynx.

Physical Examination: The patient was a white adult male, 51 years of age, cigar merchant, married, who was apparently not acutely ill. His voice was coarse and hoarse. His teeth were all out. He was 5 feet, 4 inches tall. His weight was 139 $\frac{3}{4}$ lbs. His blood pressure was systolic 118, diastolic 65; pulse pressure 53. His lungs were negative except for a mild bronchitis. The heart was well within normal limits. There were no palpable masses or tendernesses in the abdomen. His reflexes were normal. He had no rashes or other skin pathology. His temperature was 97°F., pulse 76, respiration 18.

Laboratory Findings: 1. Urine: No abnormalities. P. S. P. test 60 per cent.

2. Blood: W. B. C. 6,000, neutrophils 68 per cent, small lymphocytes 32 per cent. Malaria, negative. Wassermann, negative.

Past Illnesses: Usual diseases of childhood; influenza four years ago. Tracheotomy and laryngofissure April 4, 1930. Removals of papillomatous tissue on 2—8—31, 3—15—31, 6—1—31, 8—9—31, 8—19—31.

Family History: Father and mother both dead, cause unknown; three brothers living; no sisters. No history of cancer in the family.

Mirror Laryngoscopy: Showed freely moving

vocal cords with papillomatous tissue on both cords.

Direct Laryngoscopy (with a Haslinger directoscope): Same findings as above.

Progress: A tracheotomy was performed on September 27, 1931. Following a very satisfactory post-operative course a laryngectomy was done on October 4, 1931, with very little reaction. On October 10 patient was able to sit up in chair for fifty minutes. His subsequent course was uneventful and he was discharged on November 20, 1931, as recovered. The patient is shown today six months after operation and there is no sign of recurrence.

DISCUSSION

Dr. Robin Harris, Jackson: I do not think that laryngectomy is the only treatment for cancer of the larynx but this paper is on laryngectomy. I had the pleasure of seeing this patient before he was operated upon. Dr. Smith failed to give his history in toto. He had had a papillomatous growth of the larynx for a long time, had to have tracheotomy for it one year ago. The patient is now 52 years of age. However, the first patient I ever did laryngectomy on was 38 years of age, and he lived for about a year afterwards. He had a little more involvement than we would ordinarily like to have in the larynx.

The subject has been well covered by Dr. Smith. He is to be congratulated on his results and his technic. I might add emphasis to two points: First, the diagnosis. A biopsy is necessary and should be made in every case prior to operation. This sometimes is not absolutely necessary to the man who sees carcinoma of the larynx every few days, but is most essential to the man who sees this disease only occasionally as most of us do. The second point is the handling of the patient after laryngectomy. This is by far a most tedious job than the operation itself and requires careful, constant and persistent watchfulness. The secretion must be removed from the tracheal tube and trachea at frequent intervals. The patient must be furnished with plenty of liquids and sufficient food, especially is this true since most of these patients are usually approaching or past the proverbial three-score and ten years.

Dr. Millard F. Arbuckle (St. Louis): I appreciate your kindness in inviting me to discuss Dr. Smith's very able presentation of this difficult and most important subject.

I agree fully with his remarks concerning the importance of early diagnosis, and the possibilities for obtaining a cure if seen early and properly treated. I can think of no greater tragedy than that of the person with a hoarse voice, the result of intrinsic carcinoma, who is left with

the impression that he has only a simple inflammatory disorder.

The evidence as we find it in the literature and from our own experience is that if intrinsic cancer of the vocal cord is removed while still confined to the cord, and barring operative or post-operative difficulties, cure may be reasonably expected in practically all cases. In all other types the possibility of cure is attended by more or less fear of recurrence with any form of treatment. The necessity for a satisfactory clinical classification is apparent since on the location and extent of the lesion at the time of examination, depends the advice to be given regarding the diagnosis, the prognosis, the treatment and the final outcome in any given case.

Thomson and Colledge, who have had great experience with this disease, in their extremely helpful new book on cancer of the larynx are herewith quoted verbatim concerning the matter of classification:

"All classifications in medicine have some disadvantages, but the following scheme for the study of cancer of the larynx has fewer than most; it defines well established clinical groups and it is of great value as a guide in prognosis and treatment.

- A. Intrinsic.
- B. Subglottic.
- C. Extrinsic.
- D. Mixed.

"A. Intrinsic Cancer: This group embraces growths starting from the vocal cords, the ventricles, the ventricular bands or the interarytenoid region. Some observers have recorded more cases developing in the ventricle of Morgagni than have come our way, nor have we ever seen a case start on the surface of the ventricular band. In our experience it is unknown for cancer to originate in the posterior commissure (interarytenoid area). It is, indeed, so unusual for intrinsic cancer to originate anywhere except on the surface or margin of a cord that it might almost be called 'cordal cancer'.

"B. Subglottic Cancer: This originates on the inner or under surface of the vocal cord, or in the subglottic area, and chiefly in the anterior half of this region.

"C. Extrinsic Cancer: In this group are included neoplasms growing from the epiglottis, the aryepiglottic folds, the arytenoids, the pyriform sinuses and the pharyngeal surface of the cricoid cartilage ('post-cricoid cancer').

"D. Mixed: In this class, a combination of extrinsic and intrinsic, must be placed a number of cases which only present themselves in an advanced stage, when it is impossible to determine the site of origin.

"In the Philadelphia General Hospital seventy-five cases of laryngeal carcinoma presented them-

selves in five years. Not one was limited to the vocal cords or suitable for laryngofissure.

"In sixty-six cases of laryngeal cancer Schmiegelow met with eighteen in which the growth had extended too far to determine the primary origin. He thought that in several of them it had originated on a cord, becoming 'mixed' by extension.

"Cases of subglottic cancer frequently do not manifest themselves until the growth has extended upwards into the substance of the cord.

"Extrinsic cancer, commencing on the epiglottis or aryepiglottic folds, may grow into the glottis and so become, to some extent, intrinsic. Intrinsic cancer, neglected, may extend beyond the bounds of the larynx and thus become extrinsic. When this occurs, the treatment is no longer that of the purely intrinsic disease, but must be based on the extrinsic extension of the neoplasm.

"The above classification is generally adopted on account of its clinical usefulness. For extrinsic cancer is a 'dire disease'. In it the glands are affected at an early period, its course is rapid and it is seldom arrested or cured by operation. Intrinsic cancer, on the other hand, is a comparatively benign form of malignant disease, in its early period. At first it grows slowly and does not infiltrate rapidly. So long as the disease is limited to a vocal cord it does not affect the lymphatic glands."

The co-existence of syphilis or tuberculosis with carcinoma, one or both are not rare, and at times are difficult to differentiate. Under these conditions the most careful and painstaking study must be carried out. In this connection it must be remembered that a specimen taken for biopsy frequently is superficial and does not contain cancer cells which to our dismay may be found at a later date. Several specimens may be required before a satisfactory one is obtained.

In deciding on the type of operation to be recommended the chief point to be considered is what is needed to effect a cure. We know that when a cancer is wholly intrinsic, the possibility of cure by laryngofissure according to the method of Thomson is excellent. When subglottic and extensive or supraglottic the chances are less good and when outside the larynx, very poor.

Naturally, therefore, I prefer to do laryngofissure in suitable cases, keeping in mind the fact that the lesion must be surely intrinsic.

In those cases in which there is any doubt regarding the proper classification as intrinsic, laryngectomy is the safest treatment and whether it be helpful or not we always feel better if this is followed up by deep roentgen ray therapy.

The pre-operative preparation is important including the hygienic measures suggested as well

as careful dietary preparation for protection from the possible results of the anesthetic and the temporary lack of food immediately post-operative.

An important post-operative measure now carried out with all patients in the Washington University group of hospitals is the administration by inhalation of carbon dioxide and oxygen in the proportion of 70 per cent oxygen and 30 per cent carbon dioxide. For the first few hours or until awake this is given every fifteen minutes until the patient takes three or four deep breaths. After this every two hours when awake for the first two days and after this three times a day for the next five days. This treatment has reduced the percentage of occurrence of post-operative pneumonia, collapse of the lung, etc., in a most satisfactory manner. It is also extremely helpful and offers possibilities I think in the treatment of post-operative collapse of the lung.

My feeling is that biopsy should always be done in every case of suspected carcinoma of the larynx and this can be done in a most satisfactory manner by the Lynch suspension method. During conversation with Dr. R. C. Lynch shortly before his untimely death he told me that he was in the habit of cutting through the hyoid bone in its center when he had finished removing the larynx in the belief that by so doing he diminished in a great extent disturbance of his suture lines and flaps by muscular pull during involuntary attempts at swallowing.

I believe the two-stage operation for laryngectomy probably is the safer from the point of infection, but many successful operators carry the operation to completion in one stage.

In the advanced cases in which the growth has spread over the ventricle and the aryepiglottic fold to the pyriform sinus and pharyngeal wall operation is, in my opinion, useless and contraindicated.

I have recently had an interesting experience with the use of radon seeds in just such a case as this. In the Washington University Dispensary about two years ago a man of about sixty years presented himself with the complaint that he could breathe and speak with difficulty and

swallow only with great difficulty. He had a mixed cancer of the larynx filling the glottic chink to about three-fourths of its capacity and extending onto the lateral pharyngeal wall. Biopsy was returned squamous carcinoma. This tumor mass was planted with radon seeds by Dr. H. M. Janse and Dr. L. R. Sante. To the utter astonishment of everyone the mass disappeared, the laryngeal cartilages were apparently not harmed, the lost functions were fully regained and although some six months after this time a malignant gland was found in the supraclavicular region the man had regained his colour and his weight and at the present time shows only a slight ulceration in the vicinity of the arytenoid which may be either recurrence or dead arytenoid cartilage.

Cough sedatives of every sort should be avoided immediately before and after operation. While my experience with it is limited it seems the application of surgical diathermy especially in the control of hemorrhage is advantageous. The danger of secondary hemorrhage after its use probably is greater if applied to a wide area.

During the course of operation of any type scrupulous care must be exercised in preventing blood or mucus from entering the trachea.

The keynote in the successful treatment of cancer of the larynx is early diagnosis and expeditious and thorough removal of the growth. As had been said these patients may go for months or even years with a hoarse voice and only slight visual evidence of change, then without apparent reason, the increase in severity of symptoms is more rapid and the growth of the tumor is alarmingly rapid.

It is my impression that the blood supply to fibrous tissue is diminished rather than increased.

Dr. Raymond Smith, closing: In reply to Dr. Arbuckle's remarks as to my statement regarding more blood supply following the use of radium, I think he misunderstood what I meant there, and that is this, that if radium or deep ray therapy is given prior to a total laryngectomy there is more blood at the time of operation.

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MEDICAL PRACTICE AND ECONOMICS

In the present period of the depression the physicians are having as much, if not more, difficulty in combating the evils that arise from such a depressed period as any other group of professional, business, or laboring men. The doctor's bill is the first bill that can be and will be disregarded, and the income of the practitioner of medicine probably falls as rapidly as any other man in the community. Nevertheless, the doctor has to pay for his supplies, appliances, automobile, offices, and other expenses incidental to practice. There is no

question but that the physician has been hard hit, and that there is considerable suffering and want among those not well established in the practice of medicine, or who are in the lower income groups. Diminished income and difficulty in making expenses meet, explain the growing desire for many doctors to take refuge in salaried positions, and explain also the formation of many professional groups organized by business men, promoters, or others who will profit from the labors of the doctor, on the basis of cheap treatment; parenthetically such treatment is usually what the name cheap implies. In certain sections of the country at least these business organizations, which give medical service, are being organized in rather large numbers. Although none as yet has appeared in Louisiana and Mississippi, it is possible that it may so happen; there has already appeared in New Orleans a lay organization with salaried physicians, who will do mass treatment of the venereal infections.

The increasing tendency of doctors to abandon their high standards and to group themselves in salaried jobs, disregarding the old principle of what is right and proper in medical practice, is a phase of medicine which must be given serious thought. One of the reasons that has been advanced for the existence of these types of practice is that there are too many doctors, and that there are too many medical students in the schools of this country. Beasley* has advanced the suggestion that medical schools should cut down on the number of students admitted to their courses by twenty-five per cent. This is a suggestion of real constructive importance. The number of physicians in this country is out of all proportion to the number of possible patients. The morbidity instance has been cut down considerably by preventive health measures, and for other reasons as well there are not as many doctors needed as there were in the past. Yet following

*Beasley, B. T.: Economic Status of the Medical Profession, J. A. M. A., 99:1358, 1932.

the great reduction in the number of students which succeeded Flexner's expose of poor schools in this country, there has been a gradual increase in the number of students turned out by the seventy-seven medical schools in this country. During and immediately after the War there was a reduction in the output of the young doctors, but now we are fast approaching the enormous and ridiculous figures of twenty-five years ago. If some practical method could be evolved whereby the medical schools could reduce the number of medical students, it might be of real service to the medical profession. This would not be done solely for the purpose of helping the doctor nor for selfish reasons, but would be done for the good of the whole country. Where the profession is overcrowded, dubious methods of treatment push in, and the community as a whole suffers. Honest, high-grade, competitive practice in which the physician derives an income commensurate with his duties, gives the best type of medical service, but when a man has to grub for the dollar and competition becomes too keen then shyster methods spring up and the public suffers.

THE HEART OF THE ATHLETE

The effect of strenuous exercise on the heart of young athletes has been a subject of controversy for many years. There are those who hold that long continued strenuous athletic work is capable of producing cardiac hypertrophy and heart change. Most of the men who hold to this contention have not had the opportunity of seeing nor examining large numbers of individuals who have engaged in strenuous exercise. Some years ago an analysis was made of the men who rowed on the Harvard crew and it was found that the men engaged in this extremely strenuous exercise outlived the average comparable college age group. Lee, Dodd and Young,* examined the hearts of

men who had been rowing for years, estimating their blood pressure and heart size by accurate roentgen ray examinations. They found that the hearts of the men who had been rowing for some ten years was not larger than in men who had rowed on the Varsity crew for only a year. The Boston Marathon runners have also been studied. Richards† examined the hearts of men who had finished long distance races and found that immediately after long races the hearts were actually smaller than when they were at rest. Gordon, Levine and Wilmaers,‡ studied the circulation of a group of Marathon runners and found that even those who had been runners for years had hearts not enlarged as determined by the roentgen ray, nor was their blood pressure elevated. Sir James Mackenzie does not believe that there is such a thing as an athletic heart. He contends that the evidence as accrued is based on incomplete or imperfect examinations and that the so-called abnormalities are those which are perfectly consistent with a healthy heart. Cabot** in 600 successive, unselected patients with failing hearts was unable to incriminate athletics or immoderate exercise as the etiologic factor responsible for the condition.

The consensus of opinion by those competent to judge seems to be that strenuous exercise and vigorous athletics are not responsible for the production of high blood pressure, cardiac hypertrophy, and subsequent heart failure. These opinions are substantiated by studies in man, yet Herrmann* found that the heart-weight, body-weight ratio of those animals which engage in active life is greater than those

†Richards, T. K.: Observations on the Hearts of Men Engaged in Athletics, *J. A. M. A.*, 94: 1988, 1930.

‡Gordon, B., Levine, S. A., and Wilmaers, A.: Observations on a Group of Marathon Runners, *Arch. Int. Med.*, 33:425, 1924.

**Cabot, R.: The Four Common Types of Heart Disease, *J. A. M. A.*, 63:1461, 1914.

*Herrmann, George: The Heart of the Racing Greyhound, *Proc. Soc. Exp. Biol. & Med.*, 23:856, 1926.

*Lee, R. I., Dodd, W. J., and Young, E. L.: A Study of the Effect of Rowing on the Heart, *Bost. Med. & Surg. J.*, Sept. 30, 1915.

of the animals that lead a more vegetative existence. The racing greyhound has a heart which is the largest of any animal in proportion to body-weight, as an example. This evidence of cardiac enlargement as a result of activity in living habits would, to a certain extent, nullify the observations that have been made of the athlete's heart, yet it must be borne in mind that animals in their development have gone through innumerable generations in order to obtain a heart which is capable of responding to those excessive demands which mean survival of the species.

MALPRACTICE SUITS

A distinguished lawyer was heard to observe that malpractice suits were greatly on the increase in this country. He stated that his firm has now fifty such suits whereas twenty years ago they would have one, and he said furthermore that such was the experience of most of his professional friends. The explanation that was advanced by this distinguished advocate is something to which physicians should give thought. He stated that each and every one of the malpractice suits in his office at this time arose from the criticisms of one physician concerning the treatment or management of a case by the other doctor. If this is generally so it is well to heed

the warning. Most malpractice suits are based on insufficient evidence and wrong conception of malpractice, and are promptly thrown out of court if they ever get that far. They are a severe annoyance, bother, and worry, even if the physician does not suffer monetary loss. Those who have had the misfortune to be sued realize that this is true. They at least should be willing to forego carping criticism of the action of their brother physicians. Those who have not had malpractice suits in which they are involved should realize that at any time a thoughtless or vagrant remark by some other physician might result in the patient thinking that his treatment was improper, and result in a threatened or real court action.

The lesson to be drawn from these observations is—be careful about commenting or reflecting on the treatment given by another doctor. It may save him unjustifiable trouble, and if he does the same by you it may in turn save you from embarrassment, irritation, and distress. If nothing can be said favorably about the other man, then keep quiet, unless of course the extremely unusual happens in that the patient has been obviously and truly injured by improper treatment, whatever it may be, and honesty forbids a tacit acceptance of harm done.

HOSPITAL STAFF TRANSACTIONS

CHARITY HOSPITAL MEDICAL STAFF MEETING.

The first regular Medical Staff meeting of Charity Hospital was undoubtedly one of the most instructive and well managed clinical Staff meetings that has been held in many years. Under the able chairmanship of Dr. Wallace Durel, it was at last possible to have a pathologist, Dr. Von Haam, present to present and explain the autopsy findings of several cases.

The first case was presented by Dr. Heninger, an endothelioma of the pericardium. The patient was a white male, 42 years of age, admitted to the hospital October 4, having been sick for about two and one-half months. His complaints were pain in the left shoulder, a dry cough, dyspnea, and for

the previous week a bulging of the left side of the thorax. The patient had lost 10 pounds. On examination there was a bulging and lagging of the left thorax anteriorly. There was dullness over most of the left chest and diminished fremitus. The apex beat was visible and palpable on the right side in the mid-clavicular line. There was a to and fro pericardial friction rub at this point. The liver was slightly enlarged. Tentative diagnosis was made of left pleural effusion and pericarditis. Tuberculosis was considered as a probable etiological factor. Twelve thousand c.c. of a serosanguineous fluid was removed from the pleural cavity the following day. Three days later 1000 c.c. of fluid was removed. On the fifth day the patient developed an hemiplegia of the right side and died

at noon. At autopsy a primary endothelioma of the pleura was found with metastases to the liver, pericardium, kidney, and mediastinal lymph glands.

Dr. Von Haam presented beautiful specimens of the heart, pleura, and kidney. In addition, photomicrographs of sections of the organs were shown and explained. Dr. Von Haam stated that it had been possible to make a diagnosis of malignancy of the pleura by sedimentation and blocking of the pleural exudate.

Dr. Heninger in closing emphasized the value of this simple method of examination of fluid accumulations in the serous cavities.

Dr. P. H. Jones discussed two cases of tertian malaria treated with a new anti-malarial drug, whose trade name is atebryn. This drug is a modification and improvement of plasmochin. In the first case treated with this drug the patient was temperature free in seven days. The second patient was temperature free in eight days. There were no untoward symptoms in either case. Twenty-two and one-half grains are recommended for a cure, the dose being $1\frac{1}{2}$ grains by mouth, three times a day for five days. Dr. Bradley stated that he had treated several cases with this drug. Dr. Bethea mentioned that the drug is now available on the local market.

There then followed a presentation of several cases which had gone to autopsy. In each case the clinical findings were presented briefly, followed by a demonstration of the gross pathology and a showing of the photomicrographs of the pathological sections. The first case had a clinical diagnosis of meningo-vascular syphilis and brain tumor. The pathological diagnosis was endothelioma of the dura. In the second case the clinical diagnosis had been coronary thrombosis versus acute abdomen. The pathological diagnosis was acute hemorrhagic necrosis of the pancreas. This was a very beautiful pathological specimen. The third case had been diagnosed rheumatic heart disease and obstructive jaundice. The postmortem examination showed an acute enteritis with hemolytic streptococcal infection. The next case was one of hemiplegia. This case showed a tumor of the pituitary gland at autopsy. The fifth case, in which the clinical and pathological diagnoses agreed, was one of melanosa, primary in the leg, with metastasis to the omentum and elsewhere. The sixth case showed multiple abscesses in the heart with staphylococcal septicemia. The final case was one of actinomycosis of the liver and kidney.

Following the reading of the minutes of the previous meeting, the section adjourned.

Willard R. Wirth, M. D.

TOURO INFIRMARY STAFF MEETING.

The first regular staff meeting of the Touro Infirmary since summer vacation was held October 12, 1932, Dr. Urban Maes presiding.

An unusual case of Von Recklinghauser's disease in a white male, aged 24 years, was shown by Dr. Heninger. The onset of this condition had been in 1921 with the appearance of subcutaneous nodules over the body. The distribution and extent of these nodules were about the same over this period of time. Some of these nodules were quite painful. The patient's condition remained about the same until approximately six months ago, when he began to experience some difficulty in walking and occasionally would fall down. The unusual features in the case were the peculiar distribution of pigmentation, the unusual location of nodules in the intercostal spaces and around the posterior nerve roots, the presence of two hard masses in the abdomen, and the definite bilateral foot drop and motor disturbances of the lower extremities. A nodule removed from the arm and subjected to pathological examination showed a typical neurofibromatosis.

Dr. Anderson discussed the neurological aspects of the case, stating that the spinal fluid was negative and there was no subarachnoid block. He believed the paresis of the lower extremities due to pressure on the posterior motor nerve roots. He expressed the opinion that cranial nerve involvement was to be expected later. Laminectomy was suggested as a possible palliative procedure for this pressure in the near future. The prognosis was very unfavorable.

Dr. Lemann spoke of the level of partial anesthesia found in the case extending up to the eighth dorsal segment. The nature of the two large abdominal masses was undetermined.

Dr. Heninger presented a second case in considerable detail. A young white boy, aged 14 years, had received a prophylactic dose of antitetanic serum two hours after a nail puncture. There were no ill effects for the next thirty hours. Two days later the boy developed soreness in the left axilla and malaise. This axillary pain was thought to be due to enlarged axillary glands found at that time which were quite tender. The inguinal and cervical glands were also enlarged, and there was a low grade temperature to $100\frac{2}{5}^{\circ}$. The pain became more marked and the condition persisted for about three days. Considering the possibility of infectious mononucleosis, a blood count was made which was of no significance. Upon the sixth day following the administration of the antitoxin an urticaria developed which disappeared under medication in a short time. On the tenth day the patient began to complain of alternate cold and burning sensations in both feet and it was noticed that there was a peculiar gait. He was free of fever at this time and had none for the previous four days, nor did he ever develop any later. The patella reflexes were active at that time. Twenty-four hours later the patient was completely unable to walk and was

unable to stand. That day he was seen in consultation by Dr. Butterworth and Dr. Daspit. Dr. Daspit's opinion was that the boy had an ascending myelitis. He was removed to the hospital, and following an irregular course of improvement and then rapid retrogression, the patient died on the sixteenth day while being transported to the only available respiratory for the treatment of a suddenly developing respiratory paralysis.

Dr. Butterworth discussed the case and enumerated the positive findings found by him on his examination. Dr. Holbrook stated that he has had six cases of myelitis following vaccination, two of which cases went on to a fatal course. Dr. Cameron referred to an article published in the *Journal of the American Medical Association* in April, 1930, which discussed fifty cases of peripheral palsy due to the administration of all sera. Two or three of these had received antitetanic serum. None of them resembled this case of Dr. Heninger's in all its aspects. Apparently there has been no such case recorded previously. Dr. Von Meysenbug mentioned an observation that he had made regarding enlargement of the left axillary glands with edema of the axilla and sometimes edema of the legs following administration of antitetanic serum in children. Both of these cases had had diphtheria toxoid; both went on to an uneventful recovery. Dr. Rives emphasized the extreme rarity of such a catastrophe, enumerating the large number of patients receiving prophylactic antitetanic serum at Touro and at Charity Hospital without untoward results. In thirteen years of experience with the administration of large numbers of such injections he has seen only one rather severe reaction with recovery.

Dr. Efron spoke of the importance of preliminary testing for sensitivity by an intradermal injection.

Dr. Heninger stated that he had been unable to find a similar case reported any where. The boy had had toxoid as a child, and there was a history of allergy in the boy's father.

A very detailed description, explanation, and discussion of Schilling's hemogram was then presented by Dr. Hosen. Large drawings of the various cells to be recognized and counted in such a differential count were displayed, as were also the hemograms during the progress of several cases. Dr. Levin spoke of a case of gangrenous appendicitis in which the hemogram had justified immediate operation in spite of the mild clinical symptoms.

Dr. Witherspoon offered a short discussion on a simple method for determining the sex of the new born with abnormal genital formation. He suggested that catheterization of the presenting orifice be done, in which case the securing of urine

from such an orifice would justify the diagnosis of the child being a male.

The usual discussion of case records was dispensed with.

Willard R. Wirth, M. D.

STAFF MEETING OF THE KING'S DAUGHTERS' HOSPITAL, GREENVILLE, MISSISSIPPI.

The staff of the King's Daughters' Hospital resumed its monthly meetings on September 14, after having taken a vacation during the month of August.

The meeting was called to order by the president, Dr. John Archer, after a delightful dinner was served at seven o'clock. Those present were: Drs. Archer, Wilson, Shackelford, Davis, Beals, Pegues, Lucas, Hugh Gamble, Beck, Thompson, White, Acree, Paul Gamble, Lewis, Dickens, Payne, Hirsch and Eubanks.

The minutes of the previous meeting were read and a discussion was had of the work of the hospital for the month of July and August.

A motion was made and carried that the October meeting of the staff be held on the first Wednesday instead of the second Wednesday on account of the meeting on the second Wednesday of the Delta Medical Society at Greenwood.

Dr. L. C. Davis brought before the meeting a request from the State President of the Ladies Auxiliary to the State Medical Association that all wives be urged to attend the meeting of the Delta Medical Society at which time it is hoped there will be organized an auxiliary to the Delta Medical Society.

Motion was made and carried that a committee be appointed to invite the Delta Medical Society to meet next April in Greenville. Dr. Archer announced that he would appoint the committee later.

The health officer of Washington County gave a report of the communicable diseases reported during July and August.

A case report of "Toxemia of Pregnancy" was given by Dr. J. B. Hirsch, and discussed by Drs. Lewis, Hugh Gamble, Lucas and Thompson, with the discussion closed by Dr. Hirsch.

A case report, "Ulcer of Cornea" was given by Dr. Pegues, and discussed by Dr. L. C. Davis.

F. M. Acree, Secretary.

STAFF MEETING OF THE KING'S DAUGHTERS' HOSPITAL, GREENVILLE, MISSISSIPPI.

October 5, 1932.

Dinner was served at 7 p. m. Immediately following the dinner, the meeting was called to order by the president, Dr. John Archer. Those present were: Drs. Archer, Lewis, Dickens, Lucas, Wilson, Hugh Gamble, Thompson, White, Pegues,

Acree, Beals, Payne, Hirsch, Paul Gamble, Eubanks.

There were present as guests Dr. A. J. Milne of Jackson, who is substituting for Dr. Shackelford as County Health Officer, and Dr. F. M. Acree, Sr., of Dover, Tennessee.

The minutes of the previous meeting were read and a report of hospital work for September.

A committee was appointed by the president, Dr. John Archer, to invite the Delta Medical Society to meet in Greenville next April. This committee comprised Drs. Payne and Lewis.

A case report, "Angina Pectoris with Embolus of Femoral Artery," was given by Dr. T. B. Lewis and discussed by Drs. Hugh Gamble, Payne, and Archer, the discussion being closed by Dr. Lewis.

A case report, "Inguinal Adenitis with Specific Reference to Lymphogranuloma Inguinale," was given by Dr. C. P. Thompson and discussed by Drs. Hugh Gamble and Eubanks, the discussion being closed by Dr. Thompson.

The health report for Washington County for September was given by Dr. Milne.

Dr. F. M. Acree, Secretary.
Greenville, Oct. 11, 1932.

STAFF MEETING OF THE KING'S DAUGHTERS' HOSPITAL, BROOKHAVEN, MISSISSIPPI.

Regular monthly meeting of Brookhaven King's Daughters' Staff called to order promptly at 7:30 p. m. by the president on October 4, 1932. Usual order of business was carried out with especial study being given the cases of mortality during the preceding month. The maternity center plan was advocated to the staff and was accepted 100 per cent. We hope that we will thus do our part in helping to lower the death rate in obstetrics in the state of Mississippi. The meeting was then turned over to the program committee. Dr. J. R. Markette read a paper "Kerosine Poisoning," which was very well received. This paper was in detail with especial reference to the complications. Dr. R. S. Savage then presented two cases of thrush which so closely simulated diphtheria that antitoxin was administered in both cases, the patients finally clearing up on topical applications of gentian violet. The meeting then adjourned until the first Tuesday in November.

Other news of interest to the staff is that Dr. Warren's wife has been quite ill but has now recovered sufficiently to be among her friends again. Another item is the honor that was bestowed on Dr. W. H. Frizzell when his picture and history were carried in a recent issue of the New Orleans Medical and Surgical Journal.

R. S. Savage, Secretary.
Brookhaven, Oct. 13, 1932.

STAFF MEETING OF THE McCOMB CITY HOSPITAL.

The meeting of the Medical Staff of the McComb City Hospital was held at the institution, Thursday evening, September 29.

The following officers were elected for the coming year: President, Dr. Robert H. Brumfield; Vice-President, Dr. Thomas Purser; Secretary, Dr. L. J. Rutledge.

Those present were: Drs. L. H. Bauer, R. H. Brumfield, W. F. Cotton, W. C. Hart, B. J. Hewitt, Thomas Purser, Gladys Ratcliff, M. D. Ratcliff, and L. J. Rutledge, and Ethel W. Ormsby, Superintendent.

Ethel W. Ormsby, R. N., Superintendent.
McComb, October 8, 1932.

STAFF MEETING OF THE WILLIS WALLEY HOSPITAL.

The regular meeting of the staff of the Willis Walley Hospital was held on Friday night, October 7.

After a dinner the business of the hospital was taken up. The matter of getting out a bulletin was discussed and referred to a committee to get further information as to costs, etc.

The matter of cost per capita patient as compared with the State Charity Hospital was discussed, and it appears that the Charity Hospital can carry patients for somewhat less than half the cost of a private hospital.

Dr. H. F. Magee reported a very interesting case of allergy due to eating raw corn meal. The patient had been afflicted with a peculiarly free flow of saliva with swollen lips, more or less for several years, and had been to many doctors without relief. In response to questioning it developed that when she made up cornbread she would eat a little of the raw meal. This habit stopped she returned to normal. The condition could be brought on by a repetition of the same habit.

Dr. J. H. Thompson reported an interesting case of a tumor in the stomach of a small boy, of many weeks standing, which proved to be a mass of persimmon seed and hulls. The mass was rather hard and dry, and had a sort of crust around it. The child was operated upon and the mass removed through an opening in the stomach, with uneventful recovery.

Dr. Walley presented a clinical case of unusual interest for diagnosis—a case of pregnancy in a young woman complicated with a fibroid tumor. The patient will remain under observation for a while to see if the growth of the fibroid is progressive.

D. W. Jones, Secretary.
Jackson, October 7, 1932.

STAFF MEETING OF THE MISSISSIPPI BAPTIST HOSPITAL.

The staff met in the dining room of the hospital at 6:30 p. m. and a delightful meal was served. At the close of the meal the minutes were read and adopted as read. Mr. Alliston, the superintendent, made a short talk on the conditions of the hospital which were very favorable in every way, also he presented to the staff one of the members of the Board of Trustees.

Dr. Ainsworth was out of the city and his case reports was carried over to the next staff meeting.

Dr. Bullock presented a case,

White female, aged two and one-half years, who started with a rather high temperature which went higher and was followed by convulsions and at the onset looked like an intestinal toxæmia case. A blood count was made at home and found to be 38,000 with 84 per cent polymorphonuclears and patient was brought into the hospital. On admission was quite sick with fever 106° F. and shallow respiration at a rate of 50-60. Otherwise, the physical findings were normal. The past history was clear except for the fact that at the time the child was a few months old the family had been told that a congenital heart lesion was present but there was no evidence at the present time of such. Child was constipated and always had been. Radiographs of the chest were clear, though the heart looked enlarged. The temperature was high and of the septic type decreasing each day till the sixth day when it became normal. The white blood count also decreased accordingly to 14,000 where it remains now, two weeks after discharge from the hospital. Blood culture showed a growth in 72 hours of a gram negative diplococcus but could not be absolutely identified by the laboratory. The only diagnosis that could be made was a blood stream infection. A further check up shows that the heart has returned to its normal size now which is about half the size it was at the onset of the disease. Mr. Palmerlee discussed the laboratory side of the case stating that the organism could not be identified and showed the pictures that had been made. Dr. Garrison, Sr. discussed the case and thought that it was probably an upper respiratory infection with a gastro-intestinal toxæmia.

Mr. Palmerlee showed some plates made of one of the nurses in the hospital who had been sick for a long time with a respiratory infection which at first was diagnosed tubercular pneumonia of the right apex but which resolved itself slowly but surely as was shown by pictures in series over a period of two and a half weeks.

Dr. Long, who had been treating the case, discussed the clinical side which seemed interesting from the standpoint that the nurse had a relatively low grade fever with a rather severe infection

which has been slow in subsiding. Now the patient is very much better and yet shows some rales in the apex though the picture is clear from the roentgen ray standpoint.

Lawrence W. Long, Secretary.
Jackson, October 5, 1932.

STAFF MEETING OF THE VICKSBURG SANITARIUM.

The regular monthly meeting of the Staff of the Vicksburg Sanitarium was held on October 10. After a consideration of the reports from the records department and analysis of the work of the hospital for the month, Dr. F. Michael Smith, Director, reported on the births and deaths occurring in the county.

Special Case Reports were presented as follows:

1. Single Harelip—Mirault Operation.—Dr. A. Street. Discussed by Dr. J. A. K. Birchett, Jr.
2. Persistent Renal Hematuria of Obscure Origin.—Dr. J. A. K. Birchett, Jr. Discussed by Drs. A. Street, L. S. Lippincott and S. W. Johnston.
3. Acute Poliomyelitis, Preparalytic, Treated With Convalescent Serum; Recovery Without Paralysis.—Dr. G. C. Jarratt. Discussed by Drs. S. W. Johnston, G. W. Gaines, A. Street, G. M. Street, and L. S. Lippincott.
4. Traumatic Injury of Foot With Infection and Gangrene; Amputation.—Dr. R. A. Street, Jr. Discussed by Drs. G. M. Street, J. A. K. Birchett, Jr., and A. Street.

Dr. L. S. Lippincott discussed the Clinical Application of Blood Chemical Analyses.

Three-minute reports of the literature of the month were given as follows:

1. Dr. A. Street.—Tumors of the Small Intestine.
2. Dr. L. S. Lippincott.—Standards In Gastric Secretion.
3. Dr. J. A. K. Birchett, Jr.—Hernia in the Infant.

A lunch was served at adjournment.

Abstract.—Persistent Renal Hematuria of Obscure Origin.—Dr. J. A. K. Birchett, Jr.

Patient.—White female, aged 24 years, married, one child, one miscarriage, housewife. Chief Complaint.—Passing blood in urine with pain over bladder, onset 24 hours previous. History of Present Complaint.—Had had present complaint off and on for past three years; longest time free of symptoms was six months in 1930; had had attacks every two to three months since then. Past History.—No serious childhood diseases. Pelvic operation in January, 1932, tonsillectomy in June, 1932. One child living and well; one miscarriage in 1930; had to have curettage to relieve flooding following abortion. Had had at least 30 cystoscopic examinations with treatment

of kidneys and oil treatment of the bladder. No heart attacks, no cough no loss of weight. Digestive function normal; good appetite; suffered with constipation. No tuberculosis or cancer in family. In 1930 had similar complaint and examination in this clinic showed bleeding from left kidney. After several cystoscopic treatments the bleeding cleared up and there was no illness until March, 1931, when she came in complaining of uterine bleeding with passage of blood clots following two months of amenorrhea. A curettage was done for this flooding and microscopic examination proved an incomplete abortion. After this there was no illness or recurrence of hematuria until October, 1931, when patient began to complain of malaise, loss of weight, severe pain in left lower quadrant of abdomen and the return of the hematuria. Cystoscopic lavage of left renal pelvis, whence the blood was coming, cleared up the hemorrhage for a few days following treatment, but bleeding would promptly recur and pain in left ovarian region became more evident.

At this time the patient was seen in consultation with another surgeon and though we did not find any marked pathology except a very tender ovary there was a low grade fever present and an increase in the leukocyte count. For this reason we thought an infection was produced by the abortion early in the year. Laparotomy was advised mostly as an exploratory measure. This was done with removal of a chronically diseased left tube and appendix. The ovaries were normal; the kidneys were palpated and found to be of a normal shape, size and consistency and not abnormally mobile. The patient made an uneventful recovery and for a period of a few months following operation improved in general health and the hematuria ceased. However, in three months or about June of this year there was a return of the previous symptoms with severe headaches and at this time the complaint of sore throat, which had been sought for in previous histories but not found. The tonsils were only moderately diseased. The hematuria on cystoscopic examination at this time was noted from the right kidney pelvis and not from the left as in all previous examinations. Hematuria never had been bilateral. The urine was again injected into a guinea pig as the urine from the left kidney had been and gave negative results. No tubercle bacilli were found at any time. Staphylococcus albus was recovered from cultures. The tonsils were removed at this time, though we informed the patient that we could not say the tonsils were the active focus of the irritating infection anymore than we could say that two dead teeth which had been detected earlier in the complete physical examination were not the cause of her trouble. The two teeth being front

ones, this patient wanted to retain them as long as she possibly could for cosmetic reasons and wanted the tonsils removed first. After tonsillectomy the patient's hematuria disappeared and her general health improved rapidly. She gained weight up to her usual standard. The hematuria again developed after a rather active and much enjoyed summer vacation and a long automobile drive back home. She was seen on September 15 with urine loaded with pus and many fresh blood cells but no organisms. Cystoscopic examination showed bleeding from the left kidney. The renal function was again done and showed a low normal, right kidney 30 per cent, left 42.5 per cent. The roentgenogram at no time during her many urological examinations had shown any renal or urethral shadows suspicious of stones and the pyelograms showed normal size and contour, ruling out malignancy or growth of renal tissue. We again made a roentgen ray examination of the dead teeth and found the process of absorption more active and we again urged that these be extracted as the last possible focus that could be present and stimulating an irritation in the renal pelvis.

This case is of especial interest because of a very persistent and discouraging renal hematuria not only from the standpoint of a discouraged patient but from that of the physician as well.

The common causes of renal hematuria such as stone, tuberculosis and malignancy we feel have been ruled out. We believe that we are dealing with a focus of infection which after reduction of resistance by over stimulation or work or exercise has a special predilection for renal tissue with resulting ulceration of the renal surface and subsequent bleeding. All possible locations of focal infection have been studied with negative results, i. e. sinus, gallbladder, intestinal tract, cervix. The only suspicious foci were two dead teeth, slightly diseased tonsils, and mild pelvic inflammatory disease. So far following the extraction of the two teeth, our last procedure performed in the hope of combating this systemic disturbance, the hematuria has again ceased. We are hopeful that now the last possible focus has been removed and we will get relief from the alarming hematuria.

Abstract.—Traumatic Injury of Foot With Infection and Gangrene; Amputation.—Dr. R. A. Street, Jr.

Patient.—Colored male, aged 20 years, single, working as a helper in a levee camp; admitted to hospital August 30, 1932. Chief Complaint.—Fever; general malaise; pain, swelling, numbness and foul odor of right foot for past two days. Present Illness.—Onset August 26. Pain, numbness, and bleeding of right foot following an injury by a heavy metal piece jamming against it.

Wound was dressed shortly after by a physician, foot examined by roentgen ray, and patient kept from work. There was considerable pain the next day and foot was moderately swollen; moderate bleeding persisted. General condition good until August 28, when patient began to feel feverish and had no appetite; noticed swelling of the right ankle and foot was beginning to increase and there was a painful gland in the right groin. Symptoms became increasingly worse until admission to hospital, when the area had begun to have a foul odor and the swelling had extended up the leg beyond the ankle; no chills noted; mentally clear. Physical Examination.—A young colored male, acutely ill and looking very toxic. Temperature 101.4° F.; pulse 144, full; respiration 22, shallow and rapid; blood pressure normal. Sclerae of both eyes were icteric. Tongue coated and dry. Acceleration of the heart rate with forceful, regular sounds. Abdomen apparently negative with some question of enlargement of the spleen. Right foot showed a lacerated area involving the first, second and third toes and extending as far as the metatarso-phalangeal joint. These three toes were greenish black and had a very foul odor. The whole foot, ankle and lower one-half of the right leg were edematous and gave a feeling of crepitation in the soft tissue. The pulsation of the dorsalis pedis artery was felt and pulsation of the posterior tibial artery also was present. Much tenderness over entire foot and ankle. A large tender lymph node in the right groin about the size of an almond; no streaks noted. Blood: Leukocytes 6,600; lymphocytes 16 per cent, monocytes 2 per cent, polymorph. neutrophils 82 per cent; no malaria found. Urine showed a large trace of albumin. Course and Treatment.—Immediate operation advised. Patient was given 1000 cc. of 5 per cent glucose intravenously and then sent to operating room. The three toes were amputated at the metatarso-phalangeal joints, the area scarified and cleansed and several long incisions made along the ankle for open drainage. Ether anesthesia was used because of crepitation of soft tissue. Given 100 units of perfringens antitoxin immediately and 3000 units of tetanus antitoxin the next day. Several days later, a low leukocyte count was again found and malarial parasites demonstrated. This was of considerable interest in view of the previous poor prognosis given on account of a low total leukocyte count with a high percentage of polymorphonuclears. Quinine therapy was started immediately. For the first week there was a septic course but thereafter improvement was continuous, with no signs of anaerobic infection. Three weeks after operation the granulating surface was skin grafted from the abdominal wall. The graft is doing well at the present time but

there is still some sero-purulent drainage. General condition of patient excellent. Pathological report by Dr. Lippincott: Gangrene of toes. Smears, cultures, and animal inoculations showed tetanus bacilli. No Welch bacilli were found.

Abstract: Acute Poliomyelitis, Preparalytic, Treated With Convalescent Serum; Recovery Without Paralysis.—Dr. G. C. Jarratt.

Patient.—White female, aged 7 years. Admitted to Hospital Aug. 23, 1932. Chief Complaint.—Fever, pain in neck and right shoulder. Present Illness.—Child was in good health until morning of day before admission when she awoke and complained with pain in the back of the neck. Played all day and toward evening began to complain of pain being worse also of pain in right shoulder; temperature 101° F. This morning temperature of 102° F. and pain much worse in neck and shoulder; some headache; nausea but no vomiting. No diarrhea, convulsions, muscular twitching; no recent respiratory infection; no injury. Past History.—Pertussis at age three; chicken-pox at age five; tonsillectomy in 1928 following frequent colds and otitis media. Toxoid with negative Schick test; vaccinated against smallpox unsuccessfully; appendectomy in March, 1932. At time of operation tubercular infection found in terminal ilium. The tubercle bacilli have been found in stool on several occasions since; also a positive 1-1,000 Mantoux test; no other lesions of tuberculosis found. Family History.—Not remarkable. No tuberculosis contact. Physical Examination.—Well developed and nourished child, acutely ill, complaining of pain in neck and right shoulder. Pupils unequal, left dilated more than right; react to light and accommodation equally. Some swelling of membranes of nose but no discharge; no membrane. Teeth in fair condition. Mouth and throat showed no redness or membrane; no glands of pharynx enlarged; no posterior nasal drip. Some stiffness of neck with painful flexion, jerky in nature; no pain on lateral movement or limitation of movement; some pain on forced extension. Chest, abdomen, and genitalia not remarkable. Central Nervous System: Stiffness of neck; knee jerks normal; Kernig's sign negative; Babinski and Brudzinski negative; no ankle clonus; markedly positive "spine sign." When hand held under occiput and raised, whole body rises due to pain in spine. Some pain in muscles of right shoulder upon active and passive motion. No muscular weakness or spasticity. No nystagmus. Spinal puncture made under gas anesthesia; 15 cc. of clear, colorless fluid obtained under marked increased pressure. Total cell count 160; differential leukocyte count: small lymphocytes 10 per cent; polymorphonuclears 90 per cent. Globulin increased; sugar, quantitative, 110 mg.

per 100 cc.; chlorides 760 mg. per 100 cc. Colloidal gold test negative; Wassermann, Kahn, and Kline and Young tests negative. No tubercle bacilli or other organisms found in smears. Cultures negative.

Blood: Leukocytes 10,400; small lymphocytes 28 per cent, large lymphocytes 2 per cent, monocytes 2 per cent; polymorph. neutrophils 68 per cent; no malaria found. Urine, by catheter, not

remarkable. Course and Treatment.—Diagnosis of poliomyelitis was made and 100 cc. of whole citrated blood from an old paralytic case of poliomyelitis was given intramuscularly. There followed an uneventful recovery and by September 24 was up and about having been discharged on September 10. There was no residual paralysis. Guinea pig was inoculated and thus far is active and apparently in good health.

TRANSACTIONS OF ORLEANS PARISH MEDICAL SOCIETY

CALENDAR.

- November 2—Clinico-Pathological Conference, Touro Infirmary, 10:30 A. M. to 11:30 A. M.
- November 4—Physiology Seminar, Tulane Medical School, 5 P. M.
- November 7—Eye, Ear, Nose and Throat Hospital Staff, 8 P. M.
- November 9—Clinico-Pathological Conference, Touro Infirmary, 10:30 A. M. to 11:30 A. M.
- November 9—Touro Infirmary Staff, 8 P. M.
- November 10—French Hospital Staff, 8 P. M.
- November 11—Physiology Seminar, Tulane Medical School, 5 P. M.
- November 14—ORLEANS PARISH MEDICAL SOCIETY, 8 P. M.
- November 15—Charity Hospital, Medical Section, 8 P. M.
- November 16—Clinico-Pathological Conference, Touro Infirmary, 10:30 A. M. to 11:30 A. M.
- November 16—Charity Hospital, Surgical Section, 8 P. M.
- November 17—Eye, Ear, Nose and Throat Club, 8 P. M.
- November 18—I. C. R. R. Hospital Staff, 12 Noon.
- November 18—Physiology Seminar, Tulane Medical School, 5 P. M.
- November 18—Mercy Hospital Staff, 8 P. M.
- November 22—Baptist Hospital Staff, 8 P. M.
- November 23—Clinico-Pathological Conference, Touro Infirmary, 10:30 A. M. to 11:30 A. M.
- November 25—Physiology Seminar, Tulane Medical School, 5 P. M.
- November 28—ORLEANS PARISH MEDICAL SOCIETY, 8 P. M. Election of Delegates to the Louisiana State Medical Society and nominations for officers for 1933.

During the month of October besides the regular meeting of the Board of Directors the Society held one joint scientific and third quarterly executive meeting and one regular scientific meeting.

At the joint scientific and third quarterly executive meeting the following program was presented:

The Place of Electrocardiograph in Medicine.

By:.....Dr. Warren L. Rosen
Discussed by Dr. Randolph Lyons.

Review of 96 Cases of Abscess of the Liver.

By:.....Dr. Hermann B. Gessner
Discussed by Drs. Alton Ochsner, Sidney K. Simon, D. L. Watson, E. H. Walet, Randolph Lyons and closed by Dr. Gessner.

The Importance of the Reticulocyte Count in the Diagnosis and Treatment of Anemia.

By:.....Dr. F. M. Johns
Discussed by Dr. J. H. Musser.

Reports of the Officers and of the special and standing committees for the Third Quarter.

The Condolence Committee presented the following resolutions on the deaths of Dr. Paul J. Gelpi and Dr. Paul L. Reiss:

With a profound sadness and sense of bereavement of the irreparable loss of an honored and distinguished member and Ex-President of our Society, Paul J. Gelpi, we lament his premature demise and record:

IN MEMORIAM

A tribute to his intellectual excellence, noble character, innate probity and lofty ideals, and also this our grateful appreciation of the one grand tendency of his life and personality to elevate the whole tone of the profession he loved so well.

Our lamented comrade was gifted with the essential qualities which grace a lofty character, the union of greatness of soul with depth of heart and a profound emotional and moral nature, rare qualities, which endeared him to all, the poor as well as the rich and the ignorant as well as the literate.

His geniality was proverbial, his friendship was sincere, his love was unbounded and his heart was overflowing with sympathy, attributes for which he was universally loved and respected by his confreres and proclaimed him a stalwart leader of the profession he had served so nobly and so well.

His learning, his logical deductions, his unusual power of observation, his unbounded energy and his skill with the scalpel made him a surgeon of

note in his chosen specialty; and his eloquence, his ability to impart knowledge, his enthusiasm and his unusual experience qualified him as a distinguished teacher of his art.

Although a bold and fearless advocate of his views, he was never contumacious. His arguments always concise, condensed, incisive and logical were advanced in his debate with grace and precision. His mind was ever opened to conviction. He respected the ideas of his opponents. The clarity of his reasoning commanded the admiration and the respect of his most bitter adversaries. Always diplomatic but never compromising with principle.

He was the recipient of many honors for we knew that by honoring him we honored ourselves. In the administration of affairs he was singularly well adapted. Whether on Committees or in the Presidency he indefatigably labored for the advancement of medicine. His activities and his successes emblazon an imperishable page in the history of our Society.

Although we deeply deplore the parting of our friend and associate, Paul J. Gelpi, we glorify in the knowledge that he still lives and that his influence is still manifest, for his life was a glorious service and his memory is a benediction which radiates an example which will redound to the greater benefit of our profession for years to come.

REQUIESCAT IN PACE.

It is our sad mission to record the rather sudden death of Dr. Paul Louis Reiss, who passed to the great beyond on September 12, 1932.

Though he had not enjoyed good health for many months, he continued his duties as well as his daily routine until a short time ago when he was acutely stricken. Everyone hoped that ultimately he would convalesce, as had been the history of his past attacks, but unfortunately his time had come and he did not possess the necessary resistance to safely bring him through this illness.

Dr. Reiss graduated from the Medical Department of Tulane University in 1890. Immediately he left for Europe and matriculated at the University of Paris where he received his diploma in 1894, having devoted a great part of his time to the eye. Following his studies in France he spent two years visiting the various clinics of Berlin and Vienna and received instructions from the outstanding specialists of that time. In 1896 he returned to New Orleans and entered practice, which he continued up to the time of his death.

Dr. Paul L. Reiss was a prince of men. Though quiet in disposition, rather reserved in his demeanor and modest in his knowledge, he kept abreast of the times and enjoyed the distinction of being an outstanding man in his particular specialty. Those who were near to him, friends, professional confreres and patients alike, all

appreciated his thorough love of mankind and his desire at all times to care for those who had little of the earthly gifts. The association of the humble fisherman and his simple life was as much enjoyed by him as the contacts he gained through his many memberships in clubs and carnival organizations. Bigotry and race antagonisms had no place in his personality. He loved life and everything that it offered, and in return gave to humanity and the world at large, many years of honest and intelligent effort in his field of endeavor.

A kind, charitable, and painstaking surgeon; a courteous and polished gentleman of the old school; a loyal friend who at all times sought to aid, and even support those who came to him for counsel, advice, and assistance—in all but a part of his admirable character.

"All that live must die,
Passing through nature in eternity."

The following resolution was presented to the General Body and according to the By-Laws has to lay over to the meeting of October 24 for final action:

The Board of Directors feels that since newspapers in the City of New Orleans are not desirous of accepting medical articles without the signatures of the physician, and since the Times-Picayune is now publishing the syndicated talks of Dr. Frank McCoy, a Chiropractor, and since it is possible to have authenticated articles by reputable physicians if the signature of the physician were allowed

BE IT RESOLVED, That it is the unanimous opinion that it is within the ethics of the Orleans Parish Medical Society that physicians occupying full time teaching positions and not practicing medicine on the outside shall be authorized to write articles for the lay press and to sign one's own name providing that these articles shall have the approval of the Publicity Committee of the Orleans Parish Medical Society.

The proposed New Orleans Public Health Institute being organized in the City of New Orleans was discussed and the Society declared this Institute as being unethical and codemns such an organization. Any member connecting himself with this Institute makes himself liable to expulsion from the Society.

The special committee on Collection Agency reported at this meeting and final action is to be taken on this matter at the meeting of October 24.

At the meeting on October 24 the following program was presented:

Eyes and Teeth.

By:.....Dr. Chas. A. Bahn
Discussed by Drs. C. S. Tuller, F. M. Johns,
Ruth Aleman, W. A. Lurie, S. L. Tiblier
and G. L. Hardin.

The Psychiatric Clinic.

By:.....Dr. Henry Daspit
Discussed by Drs. E. McC. Connely, L. L. Cazenavette, and W. J. Otis.

Artificial Insemination. Report of Cases.

By:.....Dr. Joseph Cohen
Discussed by Drs. W. A. Reed, H. W. E. Walther, A. Jacobs, R. L. Gordon.

Final action on a Collection Department being established by the Orleans Parish Medical Society was postponed until a later date.

The resolution introduced at the meeting of October 10 whereby full time teachers in the local medical schools would be allowed to sign their names to articles intended for the lay press was finally acted upon unfavorably.

During October the President sent out a letter to the Membership asking that they pay their Poll Tax NOW. Your cooperation in this matter will be appreciated.

STANFORD E. CHAILLE MEMORIAL ORATION.

Dr. Joseph C. Bloodgood of Johns Hopkins Hospital will deliver the Stanford E. Chaille Memorial Oration on the night of Monday, December 19, 1932. His subject will be, "What Every Doctor Should Know About Cancer."

Dr. Bloodgood plans to spend several days in New Orleans at which time he will give a series of demonstrations on all types of malignant new growths.

This oration is intended for all members of the profession in the City and State. Dentists, nurses and medical students are cordially invited to hear Dr. Bloodgood.

THE COMMUNITY CHEST.

The people of New Orleans will be asked to pledge \$813,555, the same amount that they pledged last year, to the Community Chest in the ninth annual campaign, November 14 to 25, John X. Wegmann, president, announced. Charity and social work needs which must be met apart from New Orleans' problem of widespread unemployment are included in the Chest goal. The

amount raised by the 3000 campaign workers under General Chairman Joseph Haspel must take care of the bulk of permanent charity work in New Orleans. Agencies participating in the Chest fund are dependent for their 1933 work on the goal being reached, Mr. Wegmann stated. In setting the goal, the Chest board contemplated increased demands on the agencies, but expected that economy of operation and the increased purchasing power of the dollar would enable them to hold fast their lines and maintain their present volume of work in 1933.

TREASURER'S REPORT.

ACTUAL BOOK BALANCE 8/31/32.....\$1,369.26
September receipts:\$1,362.60

\$2,731.86

September expenditures:\$ 440.72

ACTUAL BOOK BALANCE 9/30/32.....\$2,291.14

LIBRARIAN'S REPORT.

Libraries of all types, all over the country, are bearing witness to the fact that less work has meant more time to study in a great many cases. The amount of work everywhere has been reported as unprecedented during the summer months. This state of affairs has surely been true in our own Library. There were almost as many doctors in the reading rooms and telephoning for material all summer as there were last winter.

Three hundred and seven books have been added to the Library during July, August and September. Of these 130 were received by binding, 133 by gift, 12 by purchase and 32 from the Journal.

The Louisville and Nashville Railroad and the Southern Railway Company are making special arrangements to handle the passengers from New Orleans and early points in Louisiana and Mississippi who will attend the meeting of the Southern Medical Association in Birmingham, November 16 to 18.

H. Theodore Simon, M. D.,
Secretary.

LOUISIANA STATE MEDICAL SOCIETY NEWS

EXCERPT FROM THE SANITARY CODE STATE OF LOUISIANA.

CHAPTER I. Art. 3. (a) It is hereby made the duty of every physician holding license to practice medicine in the State of Louisiana to report to the Louisiana State Board of Health and to the local Board of Health of the Municipality or Parish wherein such physician practices, any case or suspected case of communicable disease which he is attending or has examined or for which such physician has prescribed, and such report, with the exception of gonorrhoea, chancroid and syphilis, shall state the name, age, sex and race of the patient, the nature of the disease treated and the place where the patient is to be found, and such report shall be made by the physician within 24 hours of the time the physician first visits, examines or prescribes for the patient. (Franking cards and envelopes which do not require postage will be furnished physicians.) In the case of gonorrhoea, chancroid and syphilis, the name and address only of the patient shall be omitted from the report to be made, unless the patient is a food handler, in which case give both the name and address of the patient and the employer.

LA. STATE BOARD OF HEALTH.

SIXTH DISTRICT MEDICAL SOCIETY.

The Sixth District Medical Society, of which Dr. L. J. Williams is President, will hold its annual fall meeting in the City of Plaquemine, Louisiana, Wednesday, November 9, 1932, at 6:00 p. m. The following program will be presented: Urgent Abdominal Surgery in the Aged, by Dr. Isidore Cohn, New Orleans; Arthritis, by Dr. E. O. Trahan, Baton Rouge; The X-Ray as an Aid in the Diagnosis of Diseases of the Lungs, by Dr. Leon J. Menville, New Orleans; Inflammatory Diseases of the Female, by Dr. J. W. Lea, Jackson. Prior to the scientific program the physicians of Iberville Parish will entertain the Society at a banquet.

Cecil O. Lorio, M. D., Secretary-Treasurer,
Sixth District Medical Society.

EIGHTH DISTRICT MEDICAL SOCIETY.

The Eighth District Medical Society, of which Dr. G. W. Allen is President, and Dr. J. H. Landrum, Secretary, met at Alexandria, Wednesday, October 26, 1932, at the City Hall.

The list of officers elected for the ensuing year will be announced in next month's issue of the Journal.

Following the election of officers the following program was presented: Surgical Treatment of Strabismus, by Dr. Noel Simmonds, Alexandria; Radiation Treatment of Cancer of Breast, by Dr. S. C. Barrow, Shreveport, Past President, Louisi-

ana State Medical Society; Organized Medicine and Its Advantages, by Dr. Roy B. Harrison, New Orleans, President, Louisiana State Medical Society; Chronic Osteomyelitis, Film—Motion Picture; End Results of Some Unusual Fractures, Lantern Slides by Dr. W. F. Smith, Little Rock, Ark., District Surgeon, Missouri Pacific Railroad; Syphilitic Heart Disease, by Dr. J. H. Musser, New Orleans, Professor of Medicine, Tulane University; Allergic Diseases in General, by Dr. Roy M. Balyeat, Oklahoma City, Okla.; Dr. E. L. King, New Orleans, Obstetrical Problems; Cardiac Diseases, Film, shown by Mr. Story.

In addition to the invited guests on the program, the Society was honored by the presence of Dr. P. T. Talbot, Secretary-Treasurer of the Louisiana State Medical Society. The Committee on Cancer of the Louisiana State Medical Society, met for the purpose of outlining plans for a campaign against cancer.

The members of this Committee include Dr. John A. Lanford, Chairman; Dr. Arthur Vidrine, Dr. Alton Ochsner, all of New Orleans; Dr. S. C. Barrow, Dr. E. L. Sanderson, both of Shreveport; Dr. J. T. Cappel, Alexandria; Dr. D. C. Iles, Lake Charles; Dr. L. J. Williams, Baton Rouge; Dr. J. B. Vaughan, Monroe. In addition to the members of the Cancer Committee, Dr. J. W. Cox, the Field Representative of the American Society for the Control of Cancer, was present, and made some valuable suggestions to the Committee members.

The Executive Committee of the Louisiana State Medical Society had a special meeting. Those attending were Dr. Roy B. Harrison, President, New Orleans; Dr. C. A. Weiss, President-Elect, Baton Rouge; Dr. James T. Nix, First Vice-President, New Orleans; Dr. C. M. Horton, Second Vice-President, Franklin; Dr. W. P. Butler, Third Vice-President, Shreveport; Dr. J. J. Ayo, Chairman, House of Delegates, Raceland; Dr. P. T. Talbot, Secretary-Treasurer, New Orleans; Dr. S. C. Barrow, Past President, Shreveport; Dr. Daniel N. Silverman, Councilor, Second District, New Orleans; Dr. J. B. Vaughan, Councilor, Fifth District, Monroe; Dr. D. C. Iles, Councilor, Second District, Lake Charles; Dr. J. H. Landrum, Councilor, Eighth District, Alexandria.

The following New Orleans doctors also attended the meeting: Dr. F. J. Chalaron, Dr. Emmett Irwin, and Dr. H. W. E. Walther.

SECOND DISTRICT MEDICAL SOCIETY

The regular monthly meeting of the Second District Medical Society was held in Kenner, on Thursday, October 20, 1932, at 7:00 p. m., at the home of Dr. J. S. Kopfler, the president. The members and guests were delightfully en-

tertained by the host. The scientific program consisted of a talk on "Modern Methods of Treatment in Gastro-intestinal Disorders," by Dr. Daniel N. Silverman. This paper was discussed by several of the members.

A very enthusiastic response followed the remarks of the President of the State Medical Society, Dr. Roy B. Harrison, who briefly outlined the activities of several committees appointed by him. The question of abuse in charitable organizations and other organizations, which are of vital concern to the medical profession, was brought out and thoroughly discussed by many of the members and certain guests from Orleans Parish Medical Society including Drs. P. T. Talbot, Emmett Irwin, T. B. Sellers, and R. H. Potts.

Those attending the meeting from the different Parishes in the district were: Jefferson Parish, Dr. J. W. Atkinson, Dr. W. P. Hickman, Dr. J. S. Kofler and Dr. A. J. K. Genella; St. Charles Parish, Dr. L. T. Donaldson, Dr. N. K. Edrington, and Dr. F. S. Herrin; St. James Parish, Dr. L. O. Waguespack; St. John Parish, Dr. P. A. Donaldson, Dr. J. E. Clayton, Dr. E. P. Feucht, Dr. W. F. Guillotte, and Dr. J. S. Parker.

THIRD DISTRICT MEDICAL SOCIETY.

The officers of the Third District Medical Society for 1932 are as follows:

President—Dr. A. C. Kappel, Franklin.

Vice-President—Dr. E. L. St. Germain, Breau Bridge.

Secretary-Treasurer—Dr. L. B. Long, Lafayette.

EAST AND WEST FELICIANA BI-PARISH MEDICAL SOCIETY.

The Bi-Parish Medical Society met in The East Louisiana State Hospital. After a bountiful lunch in the Hospital dining room the Society met in the Staff room for the scientific program. Drs. T. B. Sellers of New Orleans and J. W. Lea of Jackson read most excellent and learned papers.

Their subjects were "Backache from a Gynecological Viewpoint" and "Pelvic Inflammatory Diseases". Both papers were freely discussed. By motion Dr. Lea's paper was ordered published in the New Orleans Medical and Surgical Journal.

Dr. Sellers was elected an honorary member of our Society.

Drs. T. S. Jones, W. K. Irwin and E. B. Young were elected active members.

Physicians present were: Drs. Sellers, Lea, Jones, Irwin, Young, Wilkinson, Smith, Shaw, Robards, McCaa, S. C. and E. M. Toler and Rev. Travis.

Also quite a number of ladies and visiting laymen.

Our next meeting will be in The Rest Hotel, Clinton, La., the first Wednesday in December at 7:30 p. m.

S. L. Shaw, President.

E. M. Toler, Secretary.

RAPIDES PARISH MEDICAL SOCIETY.

The following resolutions were passed by the Rapides Medical Society of Louisiana, in regular session, October 3, 1932.

Whereas, It is a fact well known generally, and in the common professional experience of the Medical and Surgical practitioners of this State, that the Federal Government has entered into active competition with said practitioners in that it encourages veterans to receive treatment in the Government hospitals for sickness and disabilities unconnected with service in the Army, Navy, and Marine Corps; and

Whereas, Recognizing that it is just and right that service and ex-service men are entitled to receive care at Government expense for illness and disabilities directly connected with, and incurred in the line of duty, it is also true that when the Government enters into unfair and damaging competition with the Medical profession and private hospitals of the country in soliciting and caring for ex-service men affected with ailments totally unrelated with the Government service in war or peace, it perpetrates an injustice; and

Whereas, The Medical profession, with philanthropic dedication to duty, is ever ready and prepared to answer the call of the Government in time of need; administer to the wants of the poor and destitute of any community; the said profession feels that the present practice of the Government of treating veterans whose illnesses and disabilities are not connected with army service is discriminative, and damaging to the best interests of the said profession and, as the competition of the Government has already become a serious menace to the livelihood of a large body of citizens who must obtain a living in a profession whose work is indissolubly associated with charity, and in its purposes is largely altruistic, recognizing these facts the Rapides Parish Medical Society of Louisiana offers its vigorous protest against the United States Government entering into professional competition with the medical and surgical practitioners of the Nation; and this Society hereby

Resolves, That it will and does hereby solicit the active influence of the Senators and Congressmen of Louisiana in an effort to promote legislation correcting the injustice and evils above enumerated.

L. D. Gremillion, President.

J. H. Landrum, Councilor, Eighth District.

D. B. Barber, Secretary.

NEWS ITEMS.

Prof. N. H. Polmer of the Faculty of the Graduate School of Medicine of the Tulane University of Louisiana attended the American Congress of Physical Therapy at New York during September. He read a paper, presided as Chairman at one of the sessions and was elected third Vice-president of the organization.

During his stay in New York Prof. Polmer observed postgraduate teaching methods in physical therapy at the various institutions.

Prof. W. A. Wagner and H. B. Alsobrook of the faculty of the Graduate School of Medicine of The Tulane University of Louisiana, attended the meeting of the American College of Surgeons held at St. Louis, October 17-21, 1932.

Prof. P. L. Querens of the Graduate School of Medicine of The Tulane University of Louisiana attending the meeting of the American Public Health Association at Washington, D. C., October 24-27, 1932.

A Mr. F. A. Elsner writes that Clinton, Missouri, a town of between six and seven thousand inhabitants, has no first class surgeon, and that consequently all the surgical operations go to Kansas City. An excellent opportunity is available in this town for a good surgeon.

Medical Director L. L. Lumsden has been directed by Surgeon General Cumming, U. S. P. H. S., to proceed from New Orleans, La. to Seattle and other points in Washington, as may be necessary, and return, in connection with field investigations of public health.

Assistant Surgeon Charles W. Folsom has been relieved from duty at New Orleans, La. on September 24, and assigned to duty at the National Institute of Health, Washington, D. C.

Assistant Surgeon R. C. Kash, U. S. P. H. S. was relieved from duty at New Orleans, La., on October 1, 1932, and assigned to duty at the U. S. Quarantine Station, Angel Island, Cal.

At its meeting of October 8, the Board of Directors of the American Society for the Control of Cancer took the following action:

"It was voted that the Bulletin of the Society be made its official organ and that the present relationship between the Society and the American Journal of Cancer be discontinued."

In accordance with the provisions of the Act of Congress approved February 15, 1893, the United States Interstate Quarantine Regulations are here-

by amended by the addition of Section 15½ as follows:

15½. No person, firm or corporation shall offer for shipment in interstate traffic, and no common carrier shall accept for shipment or transport in interstate traffic, any parrot, parrakeet, love bird, macaw, cockatoo, lory, lorikeet, or any other bird of the parrot or psittacine family, unless an accompanying certificate has been obtained from the State Health authority to the effect that to the best of the knowledge and belief of such authority such bird as may be offered for shipment has originated from an aviary or other distributing establishment, free from psittacosis infection.

A. A. Ballantine,
Acting Secretary of the Treasury.

THE AMERICAN COLLEGE OF PHYSICIANS.

Announcement has been made that the American College of Physicians will hold its Seventeenth Annual Clinical Session at Montreal, with headquarters at the Windsor Hotel, February 6-10, 1933.

Dr. Francis M. Pottenger of Monrovia, Calif., as President of the College, has charge of the program of General Sessions. Dr. Jonathan C. Meakins, Professor of Medicine and Director of the Department, McGill University Faculty of Medicine, is General Chairman of local arrangements and in charge of the program of Clinics. Mr. E. R. Loveland, Executive Secretary, 133-135 S. 36th Street, Philadelphia, Pa., is in charge of general business arrangements, and may be addressed concerning any feature of the forthcoming Session, including copies of the program.

INFECTIOUS DISEASES IN LOUISIANA.

Dr. J. A. O'Hara, president of the Louisiana State Board of Health, in collaboration with the Treasury Department of the United States Public Health Service, has issued mortality weekly reports which briefly abstracted contain the following information. For the thirty-seventh week of the year ending September 17, pulmonary tuberculosis was reported in numbers greater than any other reportable disease, there being 48 cases. Other diseases in double figures and in their numerical importance are 41 cases each of cancer and syphilis, 38 of pneumonia, 34 of malaria, 22 each of gonorrhea, diphtheria, and typhoid fever, and 14 of scarlet fever. One case of undulant fever was reported, 2 of poliomyelitis, 2 of meningitis, and 2 of typhus fever. For the week ending September 24, syphilis led all other diseases, there being 93 cases, while gonorrhea had 59 reported. The other frequent diseases and their numbers are 33 cases of malaria, 24 of diphtheria, 20 of cancer, 13 of pneumonia, and 13 of tuberculosis. Three cases of poliomyelitis were reported this week, as well as one of anthrax.

There was a marked increase in the number of cases of pulmonary disease reported in the week ending October 1. During this week there were reported the following diseases: Fifty-three cases of pulmonary tuberculosis, 45 of pneumonia, 45 of malaria, 37 of gonorrhea, 34 of cancer, 27 of syphilis, 17 of typhoid fever, 12 of septicemia. Of the unusual diseases there were 2 cases of undulant fever, 2 of poliomyelitis, and 2 of tularemia. The fortieth week of the year, which ended October 8, saw approximately the same number of cases of pulmonary tuberculosis reported this week as the previous week, while the pneumonia cases had fallen to 32. There were also reported 33 cases of malaria, 37 of diphtheria, 30 of gonorrhea, 28 of syphilis, 28 of cancer, and 14 of influenza. Particularly distressing were the six cases of poliomyelitis reported this week. The last weekly report, showed, for the week ending October 15, there must have been sudden interest by some one in seeking out hookworm infestations, as 97 cases were listed in this week. Cancer also took a big jump as 67 cases were recorded. Other diseases in double numbers include 46 cases of pulmonary tuberculosis, 43 of diphtheria, 38 of pneumonia, 23 of syphilis, 24 of typhoid fever, 12 of scarlet fever, 11 of influenza, and 17 of gonorrhea. No cases of poliomyelitis were reported this week, but 2 cases of undulant fever and 1 case of typhus were listed.

HEALTH OF NEW ORLEANS.

The Department of Commerce, Division of Vital Statistics, has issued the following weekly reports concerning the health of New Orleans. For the week ending September 10, there occurred in the City of New Orleans 135 deaths, giving a death rate of 14.9. Sixty-nine of these deaths were in the white race and 66 in the colored, the death rate for the former being 10.7 and for the latter 25.1. The infant mortality rate during this week was 57. For the week ending September 17, the death rate was approximately that of the previous week, being 14.5 as a result of 132 deaths, distributed 80 white and 52 colored, the death rate in the white race being 12.4 and the colored 19.8. The infant mortality rate was 68. The following week, that of September 24, was marked by a reduction of 12 in the number of deaths in the City. Of the 120 demises 66 were white and 54 colored, giving a death rate for the three groups of 13.2, 10.2 and 20.5. This week the infant mortality had jumped up to 97 as a result of the death of 17 children under one year of age. There was little change in the weekly report succeeding that of September 24, 125 deaths being reported, 79 white and 46 colored, with a total death rate of 13.8, a white death rate of 12.3, and a negro rate of 17.5. The infant mortality rate was 108, the white rate being 70 and the colored 180. For the

week ending October 8, the rate had fallen to a figure lower than for some weeks. In this seven day period the deaths were distributed as follows: Total 118, white 71, colored 47, with a death rate for the three groups of 13.0, 11.0, and 17.9 respectively. The mortality rate in infants was 102, white infants being 105 and colored 98. The death rate for the year 1932 so far has been 15.6 as contrasted with the rate of 16.7 last year. This represents a reduction of 1.1 deaths per unit of a thousand population, or approximately 450 less deaths this year than in the corresponding period last year.

DR. COUVILLON APPOINTED ON STATE BOARD OF HEALTH.

We inadvertently failed in our last issue (because we did not know it) to make mention of the promotion of Dr. S. J. Couvillon of Moreauville to the high post in State medicine-member of the State Board of Health from Central Louisiana, representing the eight parishes of the Eighth Congressional District. We regard this appointment as deserving in view of the Doctor's close affiliation with the recent and present State administrations and above all in view of Dr. Couvillon's high standing as a medical man in this district and State.

He has occupied many positions of honor and trust such as Vice-President of the Avoyelles School Board many years back, Mayor of Moreauville for several years and until recently was commissioner for the Red River and Bayou des Glaises Levee Board. He was for so many years one of the "chiefs" of the State Medical Society and at present is the official Delegate of the Eighth Congressional District Medical Society, Secretary of the Avoyelles Doctors and Surgeon for the Texas & Pacific and Louisiana and Arkansas Railroads. —(Avoyelles Weekly News).

SHREVEPORT'S FALL CLINIC.

The Third Annual Fall Clinic conducted by the physicians of Shreveport was held October 4-6, at the Charity Hospital under the direction of Dr. Guy A. Caldwell, who acted as General Chairman. The program for Tuesday morning included a series of clinics on various interesting subjects by the Shreveport doctors. The morning program was concluded by a dry clinic on gallbladder and stomach pathology, which was conducted by Dr. Alton Ochsner, Professor of Medicine, Tulane Medical School. The afternoon session was started with a dry clinic on some internal medical cases by Dr. J. S. McLester, Professor of Medicine, University of Alabama Medical School. Papers were read also by Dr. S. C. Barrow, Dr. J. E. Knighton, Dr. C. H. Webb, and Dr. Peachy R. Gilmer. After a buffet supper in the Caddo Parish Court House, there was a joint meeting of the Shreveport Medical Society, at which the Chair-

man's Address was delivered by Dr. Caldwell, and papers were read by Dr. McLester and Dr. Ochsner. The Wednesday morning program included surgical clinics and ward rounds, followed by a round table discussion-luncheon. In the afternoon session papers were read by Dr. M. D. Hargrove, Dr. A. A. Herold, Dr. R. T. Lucas, Dr. T. P. Lloyd, and Dr. A. J. Thomas.

A banquet supper was served at the Pines Sanitarium, at which motion pictures were shown.

The Thursday morning session was devoted to surgical clinics and obstetrical demonstrations, as well as ward rounds. At the afternoon meeting papers were read by Dr. R. C. Young, Dr. J. P. Sanders, and Dr. W. B. Worley. This concluded a successful and well attended three days of clinical instruction.

The many friends of Dr. L. L. Cazenavette were greatly distressed to hear of the death of his wife. Mrs. Cazenavette died after a rather prolonged illness. The members of the Medical Society and the many friends of Dr. Cazenavette will feel with him in his great sorrow.

WOMAN'S AUXILIARY NEWS

As Chairman of Press and Publicity of the Woman's Auxiliary of the Louisiana State Medical Association, I want to urge the Auxiliaries throughout the State to send in to me anything of interest concerning their meetings so that I may have it published in this Journal.

A letter from Mrs. A. A. Herold of Shreveport calls attention to the Insulin Fund of Touro Infirmary and the crying need which it helps to fill.

It will be remembered that our National President, Mrs. Walter Jackson Freeman, requested that special attention be called to the keeping of records, and I am pleased to report that both the state, with Mrs. Herman Gessner, as Historian, and the Orleans Parish Medical Auxiliary, with Mrs. H. Vernon Sims, as Historian, have responded.

To Mrs. A. L. Levin goes the honor of having compiled the first Year-book for the Orleans Parish Medical Auxiliary. The books were sent to the three hundred and twenty members of the local Auxiliary and to the Presidents of other State Auxiliaries.

The Woman's Auxiliary to the Orleans Parish Medical Society was called to order by the President, Mrs. Isadore Cohn, for the first meeting of the year 1932-1933, at the Orleans Club. The Auxiliary was entertained by the members

of the Executive Board, which consists of the following:

Mrs. Isadore Cohn, President.
 Mrs. Wm. H. Seemann, First Vice-President.
 Mrs. Arthur Vidrine, Second Vice-President.
 Mrs. Arthur Weil, Third Vice-President.
 Mrs. Frederick Fenno, Fourth Vice-President.
 Mrs. George Feldner, Corresponding Secretary.
 Mrs. Russell Stone, Publicity Secretary.
 Mrs. J. W. Warren, Recording Secretary.
 Mrs. Chaille Jamison, Treasurer.
 Mrs. Francis E. LeJeune, Parliamentarian.
 Mrs. H. Vernon Sims, Historian.
 Mrs. Lucien Alexander, Chairman of Philanthropy.
 Mrs. Jules Davidson, Chairman of the Social Group.
 Mrs. W. P. Gardiner, Chairman of Education.
 Mrs. S. M. Blackshear, Ex-President.

An account of the activities of the Board and the various committees during the summer was given and although the Auxiliary did not function as a whole, several committees deserve special mention. A large sum of money was secured through a benefit bridge party given at the Southern Yacht Club in July, which was sponsored by the Education committee. This money was used in placing 98 full-year subscriptions to Hygiea in the public schools and one subscription each in the Y. W. C. A. and the Y. M. C. A. club houses. There is a substantial balance left in the bank, for future needs. The Social Hygiene Group succeeded in getting both the chairmen of the State Board of Health and the City Board of Health vitally interested in lending their full co-operation in the fine work outlined by them for this year. A hundred dollars was voted to be set aside out of the Orleans Parish Auxiliary Commemoration fund for their use in this work. The Philanthropic Group reported that two thousand samples of medicine and baby foods had been distributed by them through the Child's Welfare nurses; and that 250 good used garments and some good house furnishings had been given through other welfare committees.

Miss Elizabeth Wisner, associate professor of Sociology at Tulane University and recently made acting director of the school of social work at this University, gave a very interesting and instructive talk to the members of the Auxiliary and their guests.

A delightful social hour followed.

Mrs. Wiley R. Buffington,
 Chairman, Press and Publicity, Woman's
 Auxiliary, Louisiana State Medical Association.

DEATHS

Lehmann, Victor, Sellers, La.: Born in 1850. Graduated from Tulane University in 1889. He was a member of the Louisiana State Medical Society. Dr. Lehmann entered medical practice at Hahnville. He was coroner of St. Charles Parish for more than 30 years. He gave up practice and the coroner's post in 1920. He died in Norco, La., on September 12, 1932.

Reiss, Paul Louis, New Orleans: Born in 1866. Graduated from Tulane University in 1890. He was a member of the Orleans Parish Medical Society, Louisiana State Medical Society, and American Medical Association. He was one of the outstanding eye specialists of the United States. He died in New Orleans, September 12, 1932.

Thomas, John N., Alexandria, La.: Born in 1860. Graduated from Tulane University in 1886. He was a member of the Rapides Parish Medical Society, Louisiana State Medical Society, and the American Psychiatric Association. Dr. Thomas was the former superintendent of the Central Louisiana Hospital for Insane at Pineville, La. He died in Alexandria on September 19, 1932.

Rappannier, Ernest A., New Orleans: Born in 1873. Graduated from Tulane University in 1894. He was a member of the Orleans Parish Medical Society, and the Louisiana State Medical Society. He died in New Orleans on October 11, 1932.

ECONOMIC VALUE OF A HUMAN BEING—

In these days of crisis we are all scrutinizing our individual budgets and budgets of the government to see where savings can be made. It is not so clear what the tax dollar buys for us as is the case with money we spend more directly for ourselves. Few studies would be more fruitful than an analysis of this question. What do we get for our tax dollars? Police protection, fire protection, health protection, education—these are some of the things which occur to one, and there are many more. What is each worth? Is it a necessity or a luxury? Could it be obtained more cheaply in any other way?

In the field of public health, the experts welcome such an analysis. They point to definite reductions in the death rate and they claim that these savings of life vastly overbalance the cost of health services. We know that a fairly complete health program for a city of 100,000 people costs at least \$2 per capita or \$200,000 a year. We know, in a special case, let us say, that the development of a phase of this program, such as water purification leading to the control of typhoid fever, has caused

RESOLUTIONS ON THE DEATH OF DR. SYLVAIN DE NUX.

Whereas, The Almighty has seen fit to remove from his family, from his patients, from his confreres, from his legion of other friends, Doctor Sylvain de Nux, following a brief but very violent disease on July 5, 1932; and

Whereas, In the death of Doctor de Nux, his native town and parish, his State which he served as Coroner, Health Officer, his local Medical Society which he represented as its official Delegate, the State Medical Societies and other medical bodies, suffers the loss of an indefatigable worker, a man of genial disposition, of charity, one who untiringly wore himself out for others, and the community has lost a useful citizen and servant, Christian gentleman; therefore, be it

Resolved, That in regular meeting assembled, the Avoyelles Parish Medical Society, in recognition of the usefulness, worthiness of its deceased member, extend to his bereaved widow, son and daughter, his relatives, its sincerest condolences in this their hour of sorrow and that copies of these resolutions be sent to his family, the local newspapers, the New Orleans Medical and Surgical Journal and a copy to be retained for the archives of the Avoyelles Parish Medical unit.

Respectfully submitted,

Emil Regard,

R. G. Ducote,

S. J. Couvillon,

Committee on Resolutions.

a saving of 100 or 200 lives a year in a city of this size. What is the dividend on our health investment? To answer, we must have an estimate of the money value of a human life.

Concrete Examples of the Value of Public Health—We may use Dublin and Lotka's figures to calculate the money value of the results achieved in the reduction of death rates in recent years. As concrete examples, we have tabulated data for New York City for various ages up to 35 years and for the two periods, 1909-11 and 1929-31. It appears from an analysis of the table that the reduction of death rates at ages under 35 between 1909-11 and 1929-31 was equivalent to the saving of nearly 24,000 lives a year, and that the lives saved at these periods were equivalent to a total saving in ultimate money capital of over two hundred million dollars a year. Fifteen million dollars would be an outside estimate of the total annual expenditure for health promotion by public and private agencies in New York City.—School Health Bureau—Welfare Division—Metropolitan Life Insurance Company.

MISSISSIPPI STATE MEDICAL ASSOCIATION NEWS

L. S. Lippincott, Editor

Jacob S. Ullman, Associate Editor

D. W. Jones, Associate Editor

THAT WE MAY KNOW EACH OTHER BETTER.

Dr. James Percy Wall was born at Magnolia, Mississippi, June 25, 1878, and has lived in Jackson, Mississippi since 1879. He was educated in the city schools of Jackson, and received his A. B. degree from Millsaps College, Jackson, in 1889, while in college serving as tutor in Greek to pay his tuition. He received his M. D. degree from the College of Physicians and Surgeons, Columbia University, in 1907, having won scholarships his last three years there. He served his internship at Bellevue Hospital, New York, from 1907 to 1909. He has practiced his profession in Jackson since July, 1909.

Dr. Wall was the first medical officer from Mississippi to reach France in the World War, having been inducted into service as a first lieutenant on June 1, 1917 and arrived in France on July 18, 1917. He had an active part in four major offensives with the British and in one with the American forces. He was promoted to major February 17, 1919, returning to this country on April 20, 1919 to be attached to U. S. General Hospital, No. 5 (Harvard Unit). Then as chief of the surgical service of U. S. Mobile Hospital, No. 6, he saw service in the Argonne offensive.

Dr. Wall was a member of the Mississippi State Board of Health, 1925-1926, and is a former president of the Central Medical Society. He is attending surgeon of the Mississippi Baptist Hospital, Jackson, a fellow of the American Medical

Association and the American College of Surgeons, a member of the Southern Medical Association and the Central Medical Society, and holds a commission as colonel in the Medical Reserve Corps, U. S. Army. He is president of the Jackson Kiwanis Club, a deacon in the First Baptist Church, Jackson, and a shiner. Dr. Wall is married.



JAMES PERCY WALL, M. D.

Jackson, Mississippi.

Speaker of the House of Delegates, Mississippi State Medical Association.

FROM OUR PRESIDENT.

Your President has visited officially the following Societies in the last few months:

Winona District Medical Society at Ackermann.

Northeast Mississippi Society at Holly Springs.

East Mississippi Medical Society at Meridian.

South Mississippi Medical Society at Laurel.

North Mississippi Medical Society at Oxford.

These meetings were all well attended, the papers interesting and well presented. In the near future it is hoped that I can, at least, visit the majority if not

all of the component societies. Try me out with a notification of your meeting. If possible I will be on hand, not to speak, not to criticise, but to enjoy your program and good fellowship.

I have attended in all three meetings of the Hospital Committee in Jackson and intend to meet with the Eighth Councilor's District Society at McComb next Tuesday.

Jim Acker, Jr.

Aberdeen, October 8, 1932.

MEDICAL WRITING.

(Continued).

From "The Art and Practice of Medical Writing," Simmons and Fishbein.—By permission.

"Society Papers.—One of the chief causes of overabundance of medical periodical literature undoubtedly is the publication of papers that were written not for publication but to be read before a medical society. A large percentage of articles appearing in medical journals are of this type. Such articles are often based on textbooks or on easily accessible literature and contain no original observation, new thought or record of experience. They may review a subject in a more or less complete form and thus be useful to read before a society, but they may not be worth publishing. As a rule, they are not well thought out or as carefully written as are those prepared especially for printing, and are not of a character to elevate the tone of periodical literature or to add to the sum total of our knowledge of scientific medicine. They cumber our literature. The demand of medical societies for contributions to their programs is the only excuse that may be offered for the deficiencies of such manuscripts. The author may have something that he is anxious to present to his fellows; more likely he has not, but selects his subject haphazardly and writes his paper from a sense of duty.

"Specialists or consultants from the city are frequently invited by the smaller medical societies to present papers. Such papers are more likely to be well worked up than are those by members of the society, whose usual purpose is merely to open a discussion. The visitor from abroad is anxious to make a good impression, and will try to enlighten his hearers on the subject he presents. He thus brings profit not only to others but also to himself. Often, however, such papers may rightly be dubbed 'pot-boilers'. They, too, are usually written for reading, not for printing.

"Frequently an editor receives a manuscript from the secretary of a medical society, who writes that the paper was enthusiastically received by the society, which voted that it be submitted with their special approval to the periodical to which it has been sent. The editor finds, to his astonishment, that the paper is ungrammatical, discursive or verbose, or poorly organized, with no sequence in argument or in arrangement of the subject. The author's presentation, his inflection, and, above all, his personality, carried it over, not only without the audience discovering any fault, but with applause as he read and congratulations at the end."

(To be continued)

HARRISON-STONE-HANCOCK MEDICAL SOCIETY

The Harrison-Stone-Hancock Medical Society met as per usual with the usual good attendance. A very interesting paper was contributed by Dr. C. M. Shipp, President of the Society, the subject of which was "The Origin and Evolution of Medicine." The paper was thoroughly enjoyed as Dr. Shipp treated his subject in a masterly manner. The rendition was both instructive and entertaining. The second paper of the evening was submitted by Dr. G. F. Carroll who chose as his subject "The Life and Contributions to Medicine of Ambroise Pare."

There was a rather intimate discussion of insurance companies and their methods, instituted by Dr. Dearman. The essential point was the sending in by the insurance companies of "another physician and in some instances a layman, to spy on the attending physician." This matter received very thorough and very unfavorable comment by those present.

Among the physicians visiting along the coast were noted the following: Dr. H. C. McLeod, Hattiesburg; Dr. E. C. Kuhlo, Miami, Fla.; Dr. Arthur Johnson, Clanton, Ala.; Dr. D. C. Montgomery, Greenville; Dr. J. P. Wall, Jackson, and Dr. L. E. Fritch, Evansville, Ind. We welcome these gentlemen and congratulate them upon their ability to get away from home during these depressive times. We would like to know how they do it. We are dodging our grocer, butcher and milk-man and as to going places, well we just ain't.

The next meeting of the society will be held in the Garden Spot of the World, the American Riviera, Biloxi. California, take note; Florida papers please copy.

George F. Carroll, County Editor.

Biloxi,
October 13, 1932.

FROM NATCHEZ

After a most enjoyable trip over to McComb, we were present at the Eighth Councilor's Annual Meeting. After a delightful luncheon served at the Methodist Church, a most entertaining and scientific program was presented.

Dr. Frizell as chairman did his part splendidly. Dr. Gardner, President of the Mississippi State Hospital Association, presented some facts and figures which were very enlightening, and which we were glad to know. Dr. Underwood, Executive Officer of the Mississippi State Board of Health, also made some very interesting remarks, and he is always listened to with attention and pleasure.

The writer was accompanied by Mrs. Gaudet and Dr. and Mrs. W. H. Aikman of Natchez. Mrs.

Gaudet was over in the interest of the Ladies' Auxiliary.

Lucien S. Gaudet.

Natchez,
October 12, 1932.

MISSISSIPPI STATE BOARD OF HEALTH

During the month of September, a school boy finished binding five years of death records and did the job very successfully. The State Board of Health purchased the binding boards and hardware and this boy did the work during vacation.

In the Bureau of Vital Statistics, there are about 500,000 records of births occurring during the first few years of the existence of the Bureau which need better indexing since this work was very indifferently done in the early days of the life of the Vital Statistics Department. No funds are available for this important work.

There are only one or two states in the United States which have lower white death rates than Mississippi has.

Dr. James R. McCord, Professor of Obstetrics and Gynecology, Emory University School of Medicine, Atlanta, Georgia, will conduct a post-graduate course of lectures at Kosciusko, during the week beginning October 24.

The following public health nurses have received scholarships for graduate study:

Miss Syd Vaughan, R. N., Brookhaven, four months study at Western Reserve.

Miss Marie Jordan, R. N., Jackson, four months study at Western Reserve.

Mrs. Josephine Jones, R. N., Meridian, study at Columbia University.

Mrs. Connie P. Higdon, R. N., Hazelhurst, four months study at Vanderbilt University.

Miss Selma Rhodes, R. N., Yazoo City, four months study at Vanderbilt University.

Every effort is being made by the Mississippi State Board of Health to secure copies of all reports made by the Board since the organization in 1877. The file is complete with the following exceptions:

1877.

1882-1883.

1886-1887.

1890-1891.

1892-1893.

1894-1895.

It may be that in the libraries of some of the physicians of the State there are one or more of these reports. If so, the donations of such report or reports would be valuable contributions to the almost complete file now in the office of the State Board of Health.

Jackson,
October 11, 1932.

LAUDERDALE COUNTY

Dr. K. T. Klein leaves shortly to attend the American College of Surgeons' Session to be held in St. Louis, Mo., Oct. 17-23, at which time he is to obtain his fellowship degree. Dr. K. T. Klein is surgeon-in-chief of Meridian Sanitarium.

Mrs. S. H. Hairston, widow of the lamented Dr. S. H. Hairston, is ill in the Meridian Sanitarium, but her condition shows improvement.

The suit for damages to the amount of \$5,000 against Dr. Chas. T. Burt of Meridian for alleged injury as a result of a hypodermic treatment culminated Saturday at noon, with the judge directing a verdict in favor of Dr. Burt.

Dr. Lowry Rush will attend the meeting of the American College of Surgeons, October 17-23. He with his brother, Dr. Leslie V. Rush, own and maintain Rush's Infirmary, which their lamented father, Dr. J. H. Rush, established. Dr. Rush has already received the fellowship degree.

Dr. G. L. Arrington, superintendent of the Matty Hersee Hospital, who was ill for some days, is able to be about his duties.

Charles T. Burt, County Editor.

Meridian,
October 10, 1932.

NORTH MISSISSIPPI MEDICAL SOCIETY

A few news items from the North Mississippi Medical Society. I am enclosing a copy of the program as carried out. We had a very fine meeting with an attendance of about seventy-five doctors. Mrs. W. C. Pool, President of the Woman's Auxiliary to the Mississippi State Medical Association, addressed the Woman's Auxiliary at the Y. M. C. A. Building at 11:00 a. m. She also made a short talk at the luncheon as is noted on the program.

PROGRAM

10:00 A. M.

Chairman.....Dr. John C. Culley, Oxford
Invocation....Malcolm Guess, Y. M. C. A. Secty.,
University

Address of Welcome.....Chancellor Alfred Hume
Response.....Dr. E. R. Nobles, Rosedale

Organ Solo, selected, Miss Ruth McNeil, University
Vocal Solo, selected,.....Mrs. Laura T. Martin,
University

"The Cardiac Limitation of Advancing Years"

..Dr. James S. McLester, Birmingham, Ala.
"Acute Surgical Conditions of the Pelvis".....

.....Dr. J. W. Barksdale, Jackson
1:15 P. M.

Luncheon at Cafeteria.

"Shine Morgan Quartet"

Talks by:

Mrs. W. C. Pool, Cary.

Dr. James M. Acker, President, Mississippi
State Medical Association.

Dr. Julius Crisler, Sr., Memphis.

Dr. G. S. Bryan, Amory.

Dr. P. W. Roland, Ex-President, Mississippi State Medical Association.

Dr. H. A. Gamble, Greenville.

Dr. Willis Campbell, Memphis.

"Changing the State Hospital System"—Dr. J. Gould Gardner, Columbia.

Women's Auxiliary meeting at Y. M. C. A. Building at 11:00 A. M. Address by Mrs. W. C. Pool, President, Women's Auxiliary to the State Medical Association.

The Society members were sorry to learn that their president, Dr. H. P. Boswell of New Albany, was unable to be present because of illness.

A. H. Little, Secretary.

Oxford,

October 10, 1932.

WILKINSON COUNTY

On September 9, the Five County District Nurses' Association was the guest of the Centreville graduate and student nurses, at the Field Memorial Hospital.

Miss Syd Vaughan of Brookhaven and Miss Connie P. Higdon of Hazelhurst were guests of honor. The meeting was called to order by Miss Marjorie Ann Patterson of McComb and after a short talk on "What Membership in State Nursing Association Means to a Young Nurse," a lunch was served. At the request of Dr. R. J. Field, Miss Vaughn presented the diplomas to six graduates.

Miss Mable Richardson, Superintendent of the hospital and president of the Five County District Nurses' Association, composed of nurses from Pike, Copiah, Lincoln, Walthal and Wilkinson Counties, was the hostess.

S. E. Field, County Editor.

Centreville,

October 9, 1932.

EAST MISSISSIPPI MEDICAL SOCIETY

Dr. T. L. Bennett, Secretary of the East Mississippi Medical Society, has sent out the following announcement:

East Mississippi Medical Society will meet on the Mezzanine Floor of the Lamar Hotel, Meridian, Miss., Thursday, October 20, at 2:00 p. m.

PROGRAM:

1. Eczema and Some of its Phases, by Dr. R. M. Leigh, Meridian, Miss.

Discussion general.

2. Present Trend of Public Health, by Dr. F. J. Underwood, Jackson, Miss.

Discussion opened by Dr. W. W. Reynolds.

3. Appendicitis, by Dr. M. L. Montgomery, Louisville, Miss.

Discussion opened by Dr. W. B. Hickman.

4. Fifteen Years Experience with Sinus Infection in Children, by Dr. Edward Clay Mitchell, Professor of Pediatrics, University of Tennessee, Medical School, and Dr. John J. Shea, nose and throat specialist, Memphis, Tenn.

Discussion general.

Meeting will be called to order promptly at 2:00 p. m.

Immediately following the meeting a luncheon will be given at Lamar Hotel, compliments of Dr. F. G. Riley and Dr. W. J. Coleman of Dr. Riley's Hospital and Clinic. You are cordially invited.

Respectfully,

J. S. Hickman, President.

T. L. Bennett, Secretary.

Meridian,

October 10, 1932.

PEARL RIVER COUNTY

Autumn is again here. Food and feed crops are being harvested and, although no one seems to have much money, most people have plenty to eat.

The satsuma orange crop is about ready to be harvested. The yield will be even greater than last year but the quality is not as good due to the freezing weather during the earlier part of the year, about time the trees were in bloom. A number of people will be employed in harvesting this crop.

Dairying is becoming an important industry in this county, especially since we have a good market in New Orleans for graded milk. A number of new Grade "A" dairies are now under construction, the milk from which is to be used in making Grade "A" pasteurized milk to place on the New Orleans market.

The sawmills are operating again and many people who have been unemployed are again at work. Old Man Depression is slowly being overcome. We are hoping that our physicians will soon be making a living wage again.

The county health unit has about completed its campaign of immunizations for the summer and fall and is now busy making physical examinations of school children, supervising milk production, and looking after the various other items of interest along public health lines.

Dr. Hillary Rouse, son of our efficient chancery clerk, H. K. Rouse, has located at Lyman, where he will have the practice of the Batson-Hatten Lumber Company.

David Henry Thornhill, son of Dr. W. T. Thornhill of Picayune, and a member of the senior class of this year at Tulane University Medical School, has returned to Tulane to resume his

studies. David Henry is a brilliant student and we are wishing for him a very successful year.

G. E. Godman, County Editor.

Poplarville,

October 7, 1932.

DESOTO COUNTY MEDICAL SOCIETY

The DeSoto County Medical Society meets in regular order on the third Monday in January, April, July and October.

Drs. W. J. Gillespie and A. A. Sparkman have recently moved from the county.

Dr. Charles Whitley Emerson, our president, has moved into his new home in Hernando.

Some weeks ago Dr. Emerson married Miss Dotson, daughter of Dr. L. W. Dotson, West Point.

Dr. I. A. Rhodes, Horn Lake, whose health has been bad for a year, is now much better.

Dr. S. J. T. Darden, Myrtle, for more than 25 years a physician of Union County, died in a New Albany hospital, October 5, at age 56.

L. L. Minor, Secretary.

Memphis, R. F. D. No. 4,

October 7, 1932.

SECOND COUNCILOR DISTRICT

The program of the meeting of the North Mississippi Medical Society, at University, is enclosed (published on another page).

The other two county societies, DeSoto and Tate, meet quarterly with fair attendance and interest. The percentage of membership is larger in these two counties than in the North Mississippi Medical Society.

The officers of these three societies are actively at work in building up their medical organizations.

L. L. Minor, Councilor.

Memphis, R. F. D. No. 4,

October 3, 1932.

LEFLORE COUNTY

I am enclosing a program of our Delta Medical Society. We would be glad to have you present.

Dr. E. R. Shurley, who recently moved to Glendora from Money, has just returned to Money to take up his old practice.

Dr. W. E. Denman and wife were called to Memphis on October 2 on account of the death of Mrs. Denman's sister.

W. B. Dickens, County Editor.

Greenwood,

October 7, 1932.

THE DELTA MEDICAL SOCIETY

Cordially Invites You to Its

Semi-Annual Meeting at

GREENWOOD, MISSISSIPPI,

WEDNESDAY, OCTOBER 12, 1932

2:00 P. M.

CONFEDERATE MEMORIAL BUILDING

Members are Urged to
Bring Their Wives
. . . or Sweethearts

PROGRAM

2:00 P. M.

1. Invocation.
2. The Woman's Auxiliary.
Mrs. W. C. Pool, Cary, Vice-President, Women's Auxiliary Mississippi Medical Society.
Mrs. W. R. Brooksher, Fort Smith, Ark., V.-Pres., Women's Auxiliary American Medical Association.
The aims of the Woman's Auxiliary will be presented to the members of the Delta Medical Society and especially to their wives assembled. After these talks the ladies will adjourn to a meeting of their own.
3. Serous Meningitis—Dr. Robert Jackson, Belzoni. Discussion to be opened by Dr. J. W. Jackson, Belzoni.
3. The Typhoid Carrier—Dr. N. C. Knight, Indianola.
4. Chronic Otitis Media—Dr. J. P. Wiggins, Cleveland.
5. Modern Resource of Radiology in Urologic Diagnosis—Dr. J. A. Beals, Greenville.
6. Osteomyelitis—Dr. F. M. Sandifer, Greenwood.
7. Treatment of Fractures of the Extremities—Dr. Guy A. Caldwell, Shreveport, La.
8. Election of officers.

7:00 P. M.—Banquet, entertainment.

Dr. George Baskervill, Greenwood, is President; Drs. John G. Archer, Greenville, S. W. Colquitt, Beulah, U. S. Wasson, Moorhead, L. H. Hightower, Itta Bena, and G. M. Brown, Vice-Presidents; Dr. R. C. Finlay, Glen Allen, Secretary.

PANOLA COUNTY

Dr. John Martin, Pope, recently made a visit to Texas to see a sick relative.

Drs. A. P. Alexander, Como, and H. R. Elliott and G. H. Wood, Batesville, attended the meeting of the North Mississippi Seven County Medical Society which met at Oxford October 5.

Panola County lost one of its most prominent physicians in the death of Dr. Edwin Wright of Sardis on September 27. Dr. Wright was 69 years old and died of cancer. He was a member of the 1886 class of Tulane Medical School. He received his literary education at the Virginia

Military Institute. He gave much of his time to the interests of his town and county, served as county health officer several years ago, was local surgeon for the I. C. R. R. Company, director of the Sardis Bank, and president of the local school board.

In answer to the card, "Do you agree with all the present laws that affect the practice of medicine and the conduct of the hospitals?"—answer, no. And would further state do not agree to the radical view of some to do away with all state charity hospitals. We need convenient and efficient hospital care for charity cases; at the same time it should be made harder for those able to pay for service to impose on the charity department. It is unfair to allow as many charity cases as Adams, Hines, Jones and Warren Counties send to charity hospitals. However, if the state hospitals were abandoned, in a short time there would be concerted action among the other hospitals for higher rates for charity cases. The editor of "The Mississippi Doctor" now says that it is a huge joke the cost per hospital day for patients that the superintendent of State Charity Hospital at Jackson reported. It will be a still greater joke—the reports some of the smaller hospitals send in if those of the state are abandoned.

G. H. Wood, County Editor.

Batesville,
October 7, 1932.

SIMPSON COUNTY

The doctors of Magee have been very busy the last three weeks treating malaria.

The Magee Hospital continues to do good work and is kept full all the time.

Dr. R. E. Giles, Mendenhall, has been suffering with a severe cold for the last week.

W. E. Diamond, Jr., has gone to Tuscaloosa, Ala., where he will attend the university this winter. Young Diamond anticipates studying medicine.

Dr. Henry Boswell and his staff at the State Tuberculosis Sanatorium are doing a work of which the state should be proud. Every man and woman in the state should visit this institution.

E. D. Kemp, Jr., has left for the University of Mississippi to begin a medical course.

If you give neither advice, consolation, nor hope to a doomed patient you are a poor doctor, indeed.

E. L. Walker, County Editor.

Magee,
October 10, 1932.

WEBSTER COUNTY

Drs. J. H. Brown, J. D. Turner and W. H. Curry attended the meeting of the Northeast

Mississippi Thirteen Counties Medical Society September 20, at Houston. A very fine program was rendered as usual. Dr. J. G. Gardner, Columbia, had a very fine paper on Community Hospitals which was very timely. It seems to us that it is time for a more equitable distribution of charity funds for the needy sick of our state.

The Winona District Medical Society will meet at Grenada, Wednesday, November 9.

We plan to have a splendid program and are extending a very cordial invitation to all the physicians in adjoining societies to come and be with us.

W. H. Curry, County Editor.

Eupora,
October 8, 1932.

HOLMES COUNTY

Dr. John King of Thornton is convalescing at a Jackson Hospital from an attack of appendicitis and acute nephritis.

Robert Stephenson, son of Dr. R. N. Stephenson of Lexington, has matriculated at Georgia Tech. In addition to playing the trumpet in the college band, he is also rapidly identifying himself with other student activities.

Dr. Arrington of Hattiesburg, a recent graduate of Tulane, is now located at Thornton.

Dr. J. J. Kazar of Tchula, in addition to being president of the Tchula Rotary Club, a champion swimmer, an expert golfer, and an all-around good fellow, further demonstrated his versatility by taking down a valuable prize at the big twenty-seven table bridge benefit party at Durant on the night of October 6. The prize was a vase of handsome cut flowers donated by the Durant Floral Company and was Consolation No. 3. Mrs. Kazar, with her playing partner, Mrs. Maxwell of Tchula, won high score.

R. C. Elmore, County Editor.

Durant,
October 8, 1932.

PONTOTOC COUNTY

Northeast Mississippi Thirteen Counties Medical Society met in Houston last month. We had a good attendance and a good program. Our next meeting, which is in December, will be in Aberdeen, the home of our state president, Dr. James M. Acker.

We are glad to report that Dr. A. P. Dunavant of Pontotoc is able to be back at work after a three weeks' illness.

Dr. W. H. Anderson of Booneville was a recent visitor.

Dr. Charlie Pyles of Saltillo made a pop call one day this week.

R. P. Donaldson, County Editor.

Pontotoc,
October 8, 1932.

CENTRAL MEDICAL SOCIETY

The regular September meeting of the Central Medical Society was held at the Edwards Hotel and called to order at 7:30 p. m. by the president. The business held attention while there was only a small crowd. A committee to draft a constitution and by-laws, modern and up-to-date, was appointed by Dr. Crisler, president, and consisted of Dr. Rembert, chairman, Drs. D. W. Jones, W. S. Sims and the secretary. A committee to investigate a credit agency for the collection of doctors' past due bills was appointed by the president and consisted of Dr. D. W. Jones, chairman, Drs. Britt and Hall and the secretary. A representative of the Jackson Adjustment Agency spoke for a few minutes outlining his plan and in effect suggesting that he himself establish an agency for the collection of doctors' past due accounts.

The subject for change of the meeting time from the third Tuesday to the first Tuesday was brought up. A motion to defer consideration until next meeting in order that more time might be given for thought on this subject carried. A motion to meet in Yazoo City in October on invitation of the Yazoo City doctors was carried. Dr. Jones read his final report as chairman of the committee on exhibits for the last spring State Medical Association meeting showing that all exhibitors had paid except one.

Drs. J. G. Thompson, I. P. Burdine and Harvey Garrison, Jr., were proposed for membership and names given to the board of censors for consideration.

Dr. W. W. Crawford, Hattiesburg, read a paper on "The Cervix and Related Pathology." This paper was discussed by Drs. Crisler, J. C. Walker, Shands, and B. N. Walker. Dr. Crawford closed.

Dr. Britt read a paper on "Rectal Examinations," which was discussed by Drs. B. N. Walker, Hays, Mosley, Rembert, Crawford, Howell and Robert Smith.

Dr. Underwood's paper on "Public Health Trends," was not open for discussion as declared by Dr. Crisler, the president, because of the late hour.

By vote of the house the secretary was instructed to send flowers to Dr. T. J. Crofford, who is ill in the Baptist Hospital. Forty-three members and guests were present. The adjournment was declared at 9:40 to meet in Yazoo City the third Tuesday in October.

Robin Harris, Secretary.

WINSTON COUNTY

The Winston County Medical Fraternity met September 21, at the Woodward Hotel and enjoyed refreshments sponsored by the writer. We had a good attendance and quite a pleasant time.

We discussed various topics dealing with cooperation and financial conditions.

Dr. W. W. Parks will attend court at Aberdeen next week.

Dr. T. C. Suttle of Beth Eden neighborhood was in the city this week. He seemed to be feeling fine over the outlook, yet he doesn't hope to collect very much.

Drs. J. H. Watkins, and T. F. Kilpatrick of Noxapater were attendants at our medical meeting.

We are glad to note that our mutual friend, Dr. J. S. Hickman of Philadelphia, is placed on the staff of the Insane Hospital at Jackson. We wish him well in his new field.

Dr. Wallace Livingston of New Mexico is in our city visiting his former friends and relatives. Dr. Livingston was reared in this county and is a doctor of ability and has proven himself so by the heavy work he has attained.

M. L. Montgomery, County Editor.
Louisville,
October 6, 1932.

ALCORN COUNTY

Local news among Alcorn County doctors will take only a few lines. Topics most discussed are "The Good Health of the Community," poor practice, poorer collections, and high taxes. However, Dr. F. C. Gilbert has recently bought and moved into the Hazard home, one of the most beautiful and pretentious residences of Corinth, and another one of our physicians has nearly paid up his note in one of our closed banks. We have been without a bank for nearly a year and most of our delinquent debtors had money in them with which they were intending to pay us, when the bank closed.

Frank, son of Dr. J. H. Hughes, Kossuth, has decided not to be a doctor and is studying engineering at Georgia Tech.

Dr. Robertson has been reelected commander of Perry Johns Post, American Legion.

Dr. Hamrick is our champion fisherman and nearly caught a seven pound bass last week.

Dr. Norwood makes the doves fly faster and Dr. Lanning is our expert at golf.

W. A. Jones, County Editor.
Corinth,
October 6, 1932.

PRENTISS COUNTY

A wedding of unusual interest to many of the profession as well as to a host of other friends was solemnized in Booneville on Wednesday afternoon, September 28, when Miss Vivian Hollandsworth, daughter of Mr. and Mrs. E. A. Hollandsworth of Rienzi, became the bride of Dr. Hayden B. Sutherland of Booneville. The Rev. J. V. Bennett officiated. Mrs. Sutherland is a

graduate of Mississippi State College for Women. Dr. Sutherland attended the University of Mississippi and the University of Louisville, receiving his M. D. degree at the latter place in June of this year. He is a member of the Sigma Phi Epsilon, Theta Kappa Psi and Alpha Omega Alpha fraternities. Dr. and Mrs. Sutherland will make their home in Booneville where he is associated with the Sutherland Clinic.

On Tuesday P. M., a number of the physicians of Prentiss County and Dr. Caldwell of Lee, met at the Northeast Mississippi Hospital in Booneville for the purpose of reorganizing the staff of this institution. The following officers were elected: Dr. L. L. McDougal, president; Dr. W. V. Davis, vice-president; Dr. R. B. Cunningham, secretary. A committee consisting of the president, secretary and Dr. W. M. Strange was instructed to draw up rules and by-laws to govern the meetings. At the conclusion of the business session, Dr. W. H. Sutherland presented a paper on caesarean section followed by hysterectomy, with case report. Dr. R. B. Caldwell presented a case report on tetany complicating an eight months' pregnancy. Both papers were liberally discussed. The next meeting will be held the first Monday night in November with Drs. W. H. Anderson and J. V. Crabb as essayists.

The physicians of Northeast Mississippi have a great treat in store for them next week. Dr. James R. McCord of Emory University will give a series of lectures on obstetrics and gynecology in Booneville, October 10 to 14, inclusive. Dr. McCord is a pleasant, affable gentleman and is the best gynecologist and obstetrician in the country. His lectures are given in a clear, concise and highly instructive manner. We are looking forward to having Dr. F. J. Underwood with us at that time. Under his leadership the Mississippi State Board of Health has developed and carried out a program of public health that is second to none in the United States.

Dr. and Mrs. W. H. Anderson, Drs. W. W. Strange and R. B. Cunningham of Booneville and Drs. R. B. Caldwell and Robert Christian of Baldwin attended the Northeast Mississippi Thirteen Counties Medical Society meeting at Houston.

Dr. W. H. Anderson was a professional visitor to Memphis last Tuesday.

Dr. W. W. Strange was recently elected president of the Prentiss County Association.

R. B. Cunningham, County Editor.
Booneville,
October 6, 1932.

JASPER COUNTY

Dr. T. E. Stafford, Stafford Springs, had the serious misfortune of losing his home in May,

1932. Dr. Stafford is a Tulane graduate, a son of the discoverer and founder of the present Stafford Springs. Dr. Stafford is a man of our local profession of whom we are very proud, and one who has given a life of service to the profession.

Dr. Evans Gavin, Richton, has acquired the Stafford Springs and is turning it into a hospital for convalescents. Dr. Gavin is a graduate of Tulane University, an able physician and a man of considerable business acumen, and in all probability the development of the lithia springs will place it at the disposal of the profession to a better advantage, and will be a great help to our profession not only locally, but nationally.

Dr. Simmons of Fauke has recently removed to Bay Springs, where he will continue general practice.

G. E. Eddy, County Editor.

Heidelberg,
October 1, 1932.

MONROE COUNTY

It has been truly said that neither time nor tide will wait for any man. To our Jewish friends another day of atonement has come and gone—a new year is opening up. To us all time speeds on. As an evidence of this fact I will say that the third quarterly meeting of the Thirteen Counties Medical Society is a fact of history now. This great meeting of this great society was held at Houston on the twentieth of September. There is no other such society and there is no other such place of meetings. A splendid program, a splendid attendance and a matchless welcome and entertainment from a people of genuine hospitality.

Dr. E. N. Holder of Memphis was our great essayist. The "Old War Horse" was equal to his reputation as well as to the occasion. We were honored by his presence—benefitted and edified by his able address. We were disappointed that he could not remain for the banquet and social feast that always follow our scientific programs. Other notables from Memphis were with us. Among these were Dr. Sanders, Dr. Whitman Roland, Dr. Hennessey and Dr. Bowen. They were, of course, very welcome.

Dr. Walker (Daddy Walker) has been quite sick and had spent considerable time in a Memphis Hospital (this was for the convenience of the specialist who was treating him, not that the Houston Hospital is not as good as any hospital in any city). His presence and the fact that his health has been restored were a delight to us all. He seemed to have been rejuvenated as well as restored to health. He was never so entertaining nor never so much appreciated as on this occasion. Dr. Walker is, indeed, a won-

derful personality. When he passes from the stage, I fear no actor can be found to take his cast. "May he live long and prosper."

Dr. Philpot was master of ceremonies or toast master at the banquet. He was never so much at ease nor never so pleasing in manner before. Dr. Philpot is a splendid surgeon, a courtly gentleman and a true friend. This world needs more of his kind.

Neither time nor space warrant mention of many others who were there and who richly deserve favorable mention. Suffice to say that Dr. Mull of whom we are growing very fond was there and extended a cordial and pressing invitation, to go to the University on the fifth instant (next Wednesday) to attend an all day meeting of the North Mississippi Seven Counties Society. Of course we shall go. At that meeting Dr. James S. McLester of Birmingham, will be prominent on the program. Dr. McLester, in my opinion, has few equals and no superiors among southern medical men. And this applies to the nation as a whole.

We bow our heads in sorrow and sympathy with our friend, Dr. McCown of Aberdeen. Last week he gave, in death, one of his lovely daughters. We can not hope to alleviate his grief. But we may bring some comfort to his crushed and broken heart by expressing our love and admiration for him and our deep regret. Dr. McCown is, indeed, one of "Nature's Noblemen," so quiet and unassuming, and yet with such lofty spirit and high ideals. His friends can trust him implicitly (and if he had enemies, so could they).

We have no cotton (the weevils got it all). hence we have no money. I fear the continued rains will ruin the corn in the fields. But we still have our friends and our self respect. So long as these remain and we can feel sure that God rules the universe, all will yet be well.

G. S. Bryan, County Editor.

Amory,
October 3, 1932.

HINDS COUNTY

The staff meetings of the Jackson Infirmary were resumed September 29. A delicious luncheon was served after which there was a very interesting and instructive program.

The Baptist Hospital staff meeting will be held at 6:30 p. m., October 4. We expect to have the usual good attendance and an interesting program.

The October meeting of the Central Medical Society will be held at Yazoo City. Every one should go over and make this the best meeting of the year. We know we are going to have a good time. Watch for the date.

Dr. W. W. Crawford, Hattiesburg, was honor guest of the Central Medical Society at the Sep-

tember meeting which was held in Jackson, September 20, at the Edwards Hotel. His paper, "The Cervix and Related Pathology," was extremely interesting and was appreciated by all.

Since squirrel season is open and cotton prices have a tendency to rise, the Hinds County doctors are in much better spirits. Get your old gun down and go hunting.

Wm. F. Hand, County Editor.

Jackson,
October 3, 1932.

HARRISON-STONE-HANCOCK COUNTIES MEDICAL SOCIETY

October meeting will be held at the King's Daughters' Hospital, Gulfport, Wednesday, October 5, at 7:30 p. m.

Papers—Drs. Carrol and Shipp.

Subject—Outstanding Figures in Early Medicine.

E. A. Trudeau, M. D., Secty-Treas.

ADAMS COUNTY

Dr. W. C. Harper, Fayette, a recent graduate in medicine from Tulane University, after two years as an interne at the hospital in Shreveport, Louisiana, has recently left for Philadelphia, where he is now connected with the medical staff of a hospital in the suburbs.

Misses Hazel Crane, Sophie Rowland, Lillian Hornsby, Gruda Mae Smylie and Mrs. L. Una Milligan, Natchez, were recently in Jackson to take the state board examinations.

L. Wallin, County Editor.

Natchez,
October 1, 1932.

CHOCTAW COUNTY

There has been no smallpox reported in our county for sometime, but we have recently had a few cases of diphtheria.

Mrs. Russell and her sons, daughter and grandsons of Dr. and Mrs. J. D. Weeks, left a few days ago for Virginia, where Mrs. Russell has a position and the boys will enter school.

Dr. Reed is rebuilding on the lot where his residence burned a few months ago. I understand it will be a handsome dwelling when it is completed.

J. James, County Editor.

Ackerman,
September 29, 1932.

YAZOO COUNTY

I have been in bed and in the house three weeks so have not been able to keep up with the Yazoo doctors. I hope to do better next time. Am improving slowly.

C. M. Coker, County Editor.

Eden,
October 8, 1932.

ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY

The regular monthly meeting of the Issaquena-Shawkey-Warren Counties Medical Society was held at the Y. M. C. A., Vicksburg, on October 11, at 7:00 p. m., with twenty-two members present. Dr. H. S. Goodman, Cary, presided.

The scientific program included the following:

1. Some Sidelights on State Medicine—Dr. E. F. Howard.

Discussed by Drs. F. M. Smith and P. S. Herring. Dr. Howard closed.

2. Some Aids in Nephritis—Dr. Leon S. Lippincott.

Discussed by Drs. I. C. Knox and L. J. Clark. Dr. Lippincott closed.

3. Endometriosis; Case Reports—Dr. P. S. Herring.

Discussed by Drs. G. M. Street, W. H. Parsons, and F. M. Smith. Dr. Herring closed.

Plans for the annual meeting to be held on Tuesday, December 13, were discussed. The program was announced as follows:

Dr. I. I. Lemann, Professor of Clinical Medicine, Tulane University of Louisiana School of Medicine—"Some Reflections Upon Peripheral Vascular Disease."

Dr. Amedee Granger, Professor of Radiology, Tulane University Graduate School of Medicine and Director of Department of Radiology, Charity Hospital, New Orleans.—Will show and give a talk on a number of interesting lantern slides which demonstrate the indispensable use of the roentgen ray in the diagnosis of some obscure clinical and surgical diseases.

Dr. Willard Bartlett, Jr., St. Louis—"Kidney Complications of Gall Bladder Disease."

The annual meeting of the Society will include a banquet and every member of the Mississippi State Medical Association and Louisiana State Medical Society is cordially invited to attend.

The Society adopted resolutions endorsing the work of Dr. F. M. Smith as Director of the Warren County Health Department and urging the Board of Supervisors to continue its appropriation for the department.

The next meeting of the Society will be held at the Y. M. C. A., Vicksburg, on Tuesday, November 8, at 7:00 p. m. The program will be in charge of Dr. N. B. Lewis, chairman; Dr. S. W. Johnston, Dr. I. C. Knox, Dr. B. T. Orendorf, Dr. G. C. Jarratt, Dr. A. K. Barrier, Dr. E. B. Stribling, Dr. J. B. Benton, Dr. B. B. Martin, Dr. W. H. Scudder, and Dr. M. J. Few.

LEST WE FORGET THEIR GOOD WORKS



P. W. ROLAND, M. D.
Oxford

President, Mississippi State Medical Association
1894-1895

Peter Whitman Rowland was born at Oakland, Miss., February 25, 1861, of Virginia stock. His great-grandfather, Michael Rowland of Virginia, who took part in the Revolutionary war, being present at the battle of Guilford Court House, traced his ancestry to John Rowland of Surrey, England, who came to America in 1635. Creed Rowland, a son of Michael, moved to Mississippi about 1840 and settled in Lowndes County, later going to Aberdeen, near which place he died, 1866. His son, Dr. Wm. B. Rowland, was the father of the subject of this sketch. Dr. Rowland's mother was a Tennessean, a descendant of Chas. Moorman of Louisa County, Va., who emancipated his slaves in 1778.

Dr. Rowland was educated in the private schools of Memphis, Tenn., and at Oakland Academy, took his medical degree from the Memphis Hospital Medical College in 1882 and settled in Coffeeville where he practiced fifteen years prior to his removal to Oxford. In 1887 he took post-graduate work in the hospitals of New York and Philadelphia, attending a course at the New York Polyclinic. He was appointed a member of the Board of Health in 1900 by Gov. Longino and re-elected to this position in 1904 by the Medical Association.

In 1903 the Medical School of the University of Mississippi was organized, at which time Dr. Rowland was elected to the Chair of Materia Medica and Pharmacology, a position he occupies at the present time (1931). He was also elected University Physician in 1907 during the administration of Chancellor Kincannon, filling this place continuously until 1925, when, on account of overwork, he resigned, since which time he has devoted his entire time to teaching. It may be worthy of note that during the entire period

of eighteen years that he served as University Physician, including the epidemics of Influenza of 1918 and 1925, personally treating five hundred and fifty cases, only one death occurred.

Dr. Rowland also takes pride in the fact (in so far as he has been able to discover) that a separate department of Pharmacology of the University Medical School, fully equipped, was one of the first in the entire country, certainly the first in the South to be organized.

Dr. Rowland was vice-president of the Mississippi State Medical Association from 1890-1891 and Corresponding Secretary from 1892-1893. He is a fellow of the American College of Physicians.

Dr. Rowland married, January 15th, 1885, Miss Eugenia Susan Herron of Coffeeville, Miss., and to this union were born four children, one of whom, Dr. Whitman Rowland, is now located in Memphis, and Herron Rowland, a druggist in the city of Oxford, Miss.

NOTE.—If anyone knows of any additions or corrections that should be made to the above sketch, please communicate with Dr. E. F. Howard, Historian, Vicksburg.

WARREN COUNTY HEALTH DEPARTMENT

At a recent meeting of the Board of Supervisors of Warren County it was voted to discontinue the appropriation for the Warren County Health Department on January 1, 1933. It was generally understood, however, that should a majority of the people favor the continuance of the department, the action of the Board might be rescinded. In support of the department, the Issaquena-Sharkey-Warren Counties Medical Society at its last meeting, adopted the following resolutions:

October 11, 1932.

REALIZING from observation and experience the remarkably worthwhile work that is being done by the Warren County Health Department in the prevention of disease and physical suffering and the better living and health conditions of our people that have come about through the leadership of its director, and

REALIZING that in Warren County since the flood of 1927, we have had an unusual opportunity for observing and studying the benefits of public health work as efficiently carried out by a full-time county health department, be it, therefore,

RESOLVED, that we, the members of the Issaquena-Sharkey-Warren Counties Medical Society, in regular meeting assembled, heartily endorse the outstanding work of Dr. F. Michael Smith, Director, and his assistants, and do respectfully request and urge the Honorable Board of Supervisors of Warren County to rescind its action whereby the Warren County Health Department would be deprived of its appropriation from the

County, to the end that the Warren County Health Department may carry on and extend its work so well established and under way and that the benefits of public health work may reach every part of the County and continue Warren County in the position of leadership which it now holds in Mississippi and beyond its borders, and be it further

RESOLVED, that copies of these resolutions be forwarded to the Honorable Board of Supervisors with the request that they be given thoughtful and constructive consideration.

Unanimously adopted.

Leon S. Lippincott, Secretary.

DISTRICT INTEREST AND ACTIVITY

The Mississippi State Medical Association News in our Journal is a responsibility of our county editors. With the exception of six counties of the state, every county has an editor or at least editors have been selected and appointed for those counties. The activities of county editors are a responsibility of the presidents of societies. When a county editor does not function, presidents are expected to know why. When presidents do not perform this part of their duties district councilors are responsible. The activities of county editors by districts is given below. Please look for your county and district. Are you proud of what is being done? If your editor is really functioning, congratulate him. If your editor is not doing his duty will you not ask your president to see that he does function or appoint an editor who will take an interest.

The Mississippi State Medical Association News is an activity of the Association designed to keep all component counties in close touch with each other and thus to strengthen and bind together the component societies for a better state organization. A strong state association benefits every member. Will you not take a part in this work? The figures below cover the last 18 months.

FIRST COUNCILOR DISTRICT

J. W. Lucas, Councilor

Possible number of items, 162; actually received, 24; per cent, 15.

County	Editor	Mo. Responsible	Mo. Active
Bolivar.....	C. W. Patterson	12	5
Coahoma.....	No editor.		
Humphreys.....	G. M. Barnes.....	11	2
Leflore.....	W. B. Dickins.....	11	11
Quitman.....	No editor.		
Sunflower.....	R. M. Donald.....	11	0
Tallahatchie.....	No editor.		
Tunica.....	No editor.		
Washington.....	F. M. Acree.....	11	7

SECOND COUNCILOR DISTRICT

L. L. Minor, Councilor

Possible Number of items, 162; actually received, 11; per cent, 6.

County	Editor	Mo. Re- sponsible	Mo. Active
Benton.....	F. Ferrell	18	0
DeSoto.....	A. V. Richmond.....	18	1
Lafayette.....	E. S. Bramlett.....	18	0
Marshall.....	D. R. Moore.....	18	1
Panola.....	G. H. Wood.....	18	4
Tate.....	W. D. Smith.....	18	1
Tippah.....	C. M. Murry.....	18	2
Union.....	H. P. Boswell.....	18	1
Yalobusha.....	G. A. Brown.....	18	1

THIRD COUNCILOR DISTRICT

M. W. Robertson, Councilor

Possible number of items, 234; actually received, 56; per cent, 24.

County	Editor	Mo. Re- sponsible	Mo. Active
Alcorn.....	W. A. Johns.....	8	4
Calhoun.....	F. L. McGauhy.....	18	0
Chickasaw.....	No editor.		
Clay.....	L. W. Dotson.....	8	3
Ittawamba.....	W. L. Orr.....	8	0
Lee.....	W. A. Toomer.....	8	0
Lowndes.....	J. W. Lipscomb.....	18	4
Monroe.....	G. S. Bryan.....	18	17
Noxubee.....	E. M. Murphey.....	8	2
Oktibbeha.....	H. L. Seales.....	18	2
Pontotoc.....	R. P. Donaldson.....	18	16
Prentiss.....	R. B. Cunningham.....	18	5
Tishomingo.....	A. S. Bostwick (18-2)	8	0

FOURTH COUNCILOR DISTRICT

T. J. Brown, Councilor

Possible number of items, 126; actually received, 25; per cent 20.

County	Editor	Mo. Re- sponsible	Mo. Active
Attala.....	C. A. Pender.....	18	3
Carroll.....	J. P. T. Stephens.....	18	5
Choctaw.....	J. J. Jones.....	18	5
Grenada.....	T. J. Brown.....	18	8
Holmes.....	R. C. Elmore.....	18	2
Montgomery.....	J. O. Ringold.....	18	1
Webster.....	W. H. Curry.....	18	6

FIFTH COUNCILOR DISTRICT

W. H. Watson, Councilor

Possible number of items, 162; actually received, 53; per cent, 33.

County	Editor	Mo. Re- sponsible	Mo. Active
Claiborne.....	W. N. Jenkins.....	18	6
Hinds.....	Wm. F. Hands.....	4	4

Issaquena.....	W. H. Scudder.....	18	6
Madison.....	Robert Smith	4	0
Rankin.....	W. H. Watson.....	4	0
Sharkey.....	W. C. Pool.....	18	8
Simpson.....	S. F. Strain.....	6	1
	E. L. Walker.....	6	3
Warren.....	E. H. Jones.....	18	11
Yazoo.....	C. M. Coker.....	18	10

SIXTH COUNCILOR DISTRICT

H. Lowry Rush, Councilor

Possible number of items, 126; actually received, 29; per cent, 23.

County	Editor	Mo. Re- sponsible	Mo. Active
Kemper.....	No editor.		
Lauderdale.....	C. T. Burt.....	18	5
Leake.....	I. A. Chadwick.....	18	1
Newton.....	S. A. Majure.....	18	1
Neshoba.....	J. S. Hickman.....	18	7
Scott.....	W. C. Anderson.....	18	0
Winston.....	M. L. Montgomery.....	18	15

SEVENTH COUNCILOR DISTRICT

Joe E. Green, Councilor

County	Editor	Mo. Re- sponsible	Mo. Active
Clarke.....	B. F. Hand.....	4	0
Covington.....	D. T. Allread.....	4	0
Forrest.....	C. C. Buchanan.....	4	0
George.....	R. F. Ratcliffe.....	4	0
Green.....	Aristophane Graham	4	0
Jasper.....	G. E. Eddy.....	17	1
	J. B. Thigpen.....	4	1
Jefferson Davis.....	G. C. Terrell.....	4	1
Jones.....	J. E. Green.....	4	1
Lamar.....	L. L. Polk.....	4	0
Marion.....	J. G. Gardner.....	4	1
Pearl River.....	G. E. Godman.....	4	1
Perry.....	B. T. Robinson.....	4	0
Smith.....	J. B. Thigpen.....	4	0
Wayne.....	W. P. Gray.....	4	0

EIGHTH COUNCILOR DISTRICT

W. H. Frizell, Councilor

Possible number of items, 180; actually received, 35; per cent, 19.

County	Editor	Mo. Re- sponsible	Mo. Active
Adams.....	L. Wallin.....	18	13
Amite.....	P. J. Jackson.....	18	2
Copiah.....	W. L. Little.....	18	5
Franklin.....	C. E. Mullins.....	18	0
Jefferson.....	R. B. Harper.....	18	0
Lawrence.....	B. S. Waller.....	18	2
Lincoln.....	W. H. Frizell.....	18	5
Pike.....	T. Paul Harvey.....	11	1
Walthall.....	B. L. Crawford.....	18	0
Wilkinson.....	S. E. Field.....	18	4

NINTH COUNCILOR DISTRICT

D. J. Williams, Councilor

Possible number of items, 72; actually received, 17; per cent, 24.

County	Editor	Mo. Responsible	Mo. Active
Hancock.....	D. H. Ward.....	5	1
Harrison.....	G. F. Carroll (18-2)	5	3
Jackson.....	B. S. McIlwain.....	18	11
Stone.....	S. E. Dunlap.....	18	0

STANDING BY DISTRICTS

District	Should Have Furnished	Did Furnish	Credit Per Cent
1. Fifth	162	53	33
2. Third	234	56	24
3. Ninth	72	17	24
4. Sixth	126	29	23
5. Fourth	126	25	20
6. Eighth	180	35	19
7. First	162	24	15
8. Second	162	11	6
9. Seventh	262	6	2

ACKNOWLEDGMENT

Your editor gratefully acknowledges special invitations to attend the meeting of the Delta Medical Society from Dr. A. G. Payne, Greenville, and the meeting of the East Mississippi Medical Society from Drs. F. G. Riley and W. J. Coleman, Meridian. He regrets that it was not possible for him to attend this time. Try him again, please.

HONOR ROLL

Your editors much appreciate the cooperation of the following who have helped to make this number of our Journal possible:

COUNTY EDITORS: L. Wallin, W. A. Johns, J. J. Jones, G. F. Carroll, W. F. Hand, R. C. Elmore, G. E. Eddy, C. T. Burt, W. B. Dickens, G. S. Bryan, G. H. Wood, G. E. Godman, R. P. Donaldson, R. B. Cunningham, E. L. Walker, F. M. Acree, W. H. Curry, S. E. Field, M. L. Montgomery, C. M. Coker—20.

COUNTY SOCIETIES—Central, Robin Harris, East Mississippi, T. L. Bennett, Harrison-Stone-Hancock, E. A. Trudeau, Issaquena-Sharkey-Warren, L. S. Lippincott, North Mississippi, A. H. Little—5.

COUNCILOR DISTRICTS: Second, L. L. Minor.

HOSPITALS: Northeast Mississippi, R. B. Cunningham; Vicksburg Sanitarium, L. S. Lippincott; King's Daughters' Hospital, Greenville, F. M. Acree; Mississippi Baptist Hospital, L. W. Long; King's Daughters' Hospital, Brookhaven, R. S. Savage; Willis Walley Hospital, D. W. Jones; McComb City Hospital, Ethel W. Ormsby—7.

OTHER CONTRIBUTORS: J. A. Birchett, Jr., J. M. Acker, F. J. Underwood, Mrs. L. S. Gaudet,

E. F. Howard, Mrs. H. H. Haralson, Mrs. D. J. Williams, R. A. Street, Jr., G. C. Jarratt, Mrs. P. B. Holloman, Mrs. L. S. Lippincott, A. G. Payne, J. P. Wall, Mrs. W. C. Pool, L. S. Gaudet, F. G. Reiley, W. J. Coleman—17.

GRAND TOTAL—50.

WOMEN'S AUXILIARY TO THE MISSISSIPPI STATE MEDICAL ASSOCIATION

President—Mrs. W. C. Pool, Cary.

President-elect—Mrs. M. L. Van Alstine, Jackson.

Mrs. Leon S. Lippincott, Vicksburg, Press and Publicity Chairman.

State Convention, Jackson, May 9, 10 and 11, 1933.

A MESSAGE FROM THE STATE PRESIDENT

Just a short report of my "official visits" to several of the Auxiliaries of Mississippi.

On October 5 it was my privilege to be with the Hinds County Auxiliary at its regular meeting and such an inspiration to be with this group of ladies. They are planning to have monthly meetings and I am sure they will go forward in the work with much steadfastness, which will be very beneficial to each one. While in Jackson, (Hinds County), I had the pleasure of being in the home of Dr. and Mrs. A. G. Wilde. Mrs. Wilde is the local president also our state secretary, and a charming hostess. While I disliked to leave such a pleasant home, I knew other places were expecting me so October 5 was spent at Oxford, with the Auxiliary to the North Mississippi Medical Society. While there I was fortunate enough to be the guest of Dr. and Mrs. A. H. Little. The attendance there was very disappointing, but they are very loyal as the paid-up membership shows. I trust North Mississippi will become a little more active.

October 6 will always be a bright spot in my memory. It was just a year ago that they organized, and such an enthusiastic group of doctors' wives. The meeting was held at Bude, in the home of Dr. and Mrs. C. E. Mullins, where a splendid luncheon was served. Mrs. Mullins is local president.

I then came home tired and happy—happy that I am allowed the privilege of the contact of the wives of the physicians of Mississippi. On October 12, we drove over to Greenwood to meet with the Delta Medical Society which so whole-heartedly gave its permission to organize an Auxiliary to the society. This group of women had the pleasure of hearing and meeting Mrs. Wm. R. Brooksher, Jr., Fort Smith, Ark., who is second vice-president to the Women's Auxiliary to the American Medical Association. Mrs. Brooksher is a most charming woman of great personality and her talk was very instructive and inspiring.

So sorry that every doctor's wife of Mississippi could not have had the opportunity to hear our guest of honor, Mrs. Brooksher. So glad to report an organization was perfected to the Delta Medical Society. A write-up of this meeting will appear later. Just wanted to tell everybody that the Delta Medical Society has a most enthusiastic Auxiliary. I am expecting great things of this new organization.

In this issue you will find an article, "The Doctor's Wife," by Mrs. T. B. Holloman, Itta Bena. This was read as a toast at a meeting of the Delta Medical Society and appeared in the little magazine, "The Mississippi Doctor," some time ago. We sincerely trust Mrs. Holloman will send us some of her splendid writings from time to time.

There are lots of happy incidents I could tell you of these pleasant visits, but space will not permit, however, let me beg of you to never falter in your efforts to make our Auxiliary reach the highest peak of efficiency.

I thank you.

Mrs. W. C. Pool.

Cary,
October 14, 1932.

THE DOCTOR'S WIFE

The woman who is honored most in song and story is "Mother". Next to mother, I beg the privilege to place in rank of honor, the Doctor's Wife, the silent partner of the medical profession. Silent, though always on the job, because you of the medical profession, more than any one else know and understand the mystic hour of joy and pain that puts the halo around mother. You will know and understand why I place the doctor's wife so highly whether she be a mother or not.

This partner of yours has kept pace with you along every line save one—she had not been permitted to specialize. You can choose the line of work you like best and for what you are most fitted and attain perfection in that line. Not so—your partner—she must be perfect in many lines. First, as a home-maker she must practice the laws of hygiene to demonstrate your teachings. For the same reason the children in the home must be kept physically fit. She must be prepared to give first aid to the neighborhood children as well as her own when the "doctor is out," keeping a supply of bandages, iodine, etc., for stumped toes, cut heads and the like. The doctor's wife, more than the wife of the minister, is called upon to bring joy and sunshine into the sick room; to drop the sympathizing tear and words of comfort or as the intercessor asking divine blessings on the means being used to restore life and health. In the religious activities and social affairs of the community she is ex-

pected to be in the forefront. She must not only be a friend to the elite of the community but the poor and humble, including the colored races.

Last but not least, she must rival the telephone girl with a pleasant voice and courtesy (and all this, may be, after a sleepless night) and her reward—to go alone to seek recreation at the theater party while you are "making a call."

May I remind you of the mythological story of Theseus and his love,—how, when he was leaving to go to the forest to conquer the wild beast, his love tied a silken cord around his arm, retaining the ball of cord. She told him when he was in danger the cord would tighten around his arm reminding him that she was thinking of him and praying for him. When you are away from home battling with disease the silken cord that tightens around you is a prayer in the heart of this silent partner—with all honor to that one, second only to "Mother", "The Doctor's Wife."

Mrs. T. B. Holloman, Itta Bena.

WARREN COUNTY

The Auxiliary benefit card party given by the Warren County members of the Auxiliary to the Issaquena-Sharkey-Warren Counties Medical Society at the Coral Room in the Hotel Vicksburg was a huge success and the funds from this entertainment will be used to pay our part to send some needy child to the Preventorium at Magee and to buy some magazines and other things for the children there. The public always responds to any worthy cause and we were very grateful to them for responding at this time.

Dr. and Mrs. S. W. Johnston and Miss Polly Pond have returned from a three weeks' visit to Rochester, Minn., where Mrs. Johnston and Miss Pond were the guests of Dr. and Mrs. Hugh H. Johnston, and Dr. Johnston spent a very profitable time visiting the Mayo Clinic.

We were delighted to see Dr. M. H. Bell down town mingling with friends after an illness of several months.

Mesdames Gus Street and H. H. Haralson accompanied the executive secretary, Mrs. Mildred L. Herzog, and her co-workers to the Red Cross Regional meeting at Yazoo City, this month.

The Warren County Anti-Tuberculosis Association had as its guests Mr. J. T. Savage, president, and Mr. Logan H. McLean, Jackson, executive secretary, at the last meeting. The ladies of the Medical Auxiliary compose a part of this organization as follows: Mrs. H. H. Bell, president; Mrs. H. H. Haralson, vice-president; Mrs. Augustus Street, recording secretary, and Mrs. S. W. Johnston, member of the Executive Board.

All are active workers against tuberculosis.

Dr. and Mrs. H. B. Wilson are now residing

in their cozy suburban home and are enjoying the quietude of country life.

Mrs. Norman Stout, daughter of Dr. and Mrs. M. H. Bell, has fully recovered from appendicitis and has returned home.

At the home of Dr. and Mrs. George Street last month there was a parcel post party for the benefit of the Trinity Church Group No. 5, of which Mrs. Street is leader. There were several hundred packages donated and they in turn were sold at reasonable prices. The ladies sold everything and to make the party more sociable served sandwiches and tea to their guests.

Mrs. H. H. Haralson spent several days this month with her mother, Mrs. L. D. Coats, at Bas-trop, La. Accompanying her were Misses Ethel Klein, Ann White, Leavel Coats and Jean Selby.

Mrs. H. H. Haralson, Publicity Chairman.
Vicksburg,
October 12, 1932.

PIKE COUNTY.

It gives me pleasure to inform you of our successful organization of a Ladies Auxiliary in Pike County at McComb yesterday. We took advantage of the opportunity to organize while all of the wives of the doctors of the Eighth Councilor's District had assembled in McComb, as guests of the doctors.

At one time there was a Ladies Auxiliary in this county, but it had dis-assembled. There was a splendid group of the ladies present from the different counties comprising the Eighth District.

Great credit goes to Mrs. Tomas Purser and the other ladies of McComb and Pike County, in their untiring efforts to complete the organization and for the splendid dinner and program that was given after the meeting at Mrs. Bauer's residence. She was a most delightful hostess.

After the ladies had assembled in the Methodist Church, the meeting was called to order by Mrs. Lucian S. Gaudet of Natchez, Councilor for the Eighth District. The ladies were honored by Mrs. F. L. VanAlstine, president-elect and chairman of organization, who gave a very interesting talk on the purposes of the organization. We were also delighted by the interesting address of Mrs. Dan Williams of Gulfport. There were many interesting guests present: Mrs. Wilde and Mrs. Garrison of Jackson, Mrs. Frizell, Mrs. May and others from Brookhaven, Mrs. Field and Mrs. Catchings from Wilkinson County, and many other delightful visitors of whom I did not get an opportunity to get the names. A motion was then made to re-organize the Auxiliary in Pike County, and after some discussion the following officers were elected: Mrs. T. B. Abney of McComb, president; Mrs. Thomas Purser, vice-president; Mrs. W. F. Cotton, secretary-treasurer, and Mrs. Moore of Magnolia, historian. There being

no further business to come before the organization the motion was made to adjourn. The ladies then drove out to the beautiful home of Dr. and Mrs. H. L. Bauer, where the guests were entertained by recitations, music numbers and dancing, after which tea was served by Mrs. Cotton and Mrs. Abney. Those in the receiving line were Mrs. H. L. Bauer, Mrs. R. H. Brumfield of McComb, Mrs. VanAlstine, Mrs. T. Hewitt and Mrs. Gaudet.

Sincerely,

Mrs. Lucien S. Gaudet,
Councilor Eighth District.

Natchez, October 12, 1932.

HARRISON-STONE-HANCOCK COUNTIES.

The October meeting of the Women's Auxiliary to the Harrison-Stone-Hancock Counties Medical Society was held Wednesday, October 5, at the home of Mrs. E. D. Gay in Long Beach. Following the regular routine of business a discussion pertaining to the painting to be done by the Auxiliary was taken up, the members expressing pleasure in playing a part in this necessary work. Mrs. E. C. Parker is chairman of the committee on hospital improvement.

A nice donation was given to the fund for Mrs. R. S. Dinsmore whose home was completely destroyed by a water spout two weeks ago. Mrs. D. J. Williams had served as chairman of this worthy cause as a representative of the Women's Club and the Auxiliary was glad to help Mrs. Dinsmore who has been active more than twenty-five years on the hospital board.

Plans were made for entertaining our State President, Mrs. W. C. Pool, on November 2 at the home of Mrs. E. C. Parker.

Those present were Mesdames George Melvin, President, Beckett, Laird, Gay, McWilliams, Files, Parker, Williams, and Dr. Emma Gay.

The young son and daughter of Drs. A. S. and Margaret Caraway, Archibald and Margaret, are attending state college at Oxford this year. Young Archibald is taking the medical course.

Mrs. W. A. Dearman is better after an illness of nearly a month.

Dr. and Mrs. Dan Williams visited the meeting of the Pike County Medical Society at McComb on October 11—a splendid time and program was thoroughly enjoyed.

The entertainment and supper given by the Women's Auxiliary at the home of Dr. and Mrs. D. G. Rafferty of East Beach, Pass Christian, in September, was attended by about two hundred guests from Bay St. Louis to Biloxi. Assisting Mrs. Rafferty in receiving and serving were Mesdames George Melvin, E. C. Parker, W. E. Manney, C. A. McWilliams, M. M. Snelling, W. A. Dearman, Daniel J. Williams and Dr. Emma Gay. Supper was served. Proceeds from the entertain-

ment will be used by the Auxiliary in its work inside the King's Daughters' Hospital, Gulfport, a sum of about \$100 being realized.

Mrs. D. J. Williams, Publicity Chairman.
Gulfport, October 7, 1932.

WOMEN'S AUXILIARY TO THE DELTA MEDICAL SOCIETY.

A meeting of all the wives of the doctors of the Delta Medical Society was called in Greenwood, Oct., 12, for the purpose of organizing an Auxiliary to the Delta Medical Society.

There were 16 wives present representing three of the five counties in the Delta. Mrs. F. M. Sandifer of Greenwood acted as temporary president while Mrs. J. P. Bates of Greenwood acted as temporary secretary.

Mrs. W. C. Pool of Cary, the state President, read the state constitution and by-laws and Mrs. Brooksher of Fort Smith, Ark., the first vice-president of the National Medical Auxiliary spoke on "Why Have an Auxiliary?"

Mrs. Beals moved that the organization be formed and immediately the Women's Auxiliary

to the Delta Medical Society proceeded to organize. The officers elected were as follows:

Mrs. J. A. Beals, Greenville, President.

Mrs. J. C. Adams, Greenwood, First Vice-President.

Mrs. J. C. Pegues, Greenville, Secretary and Treasurer.

Mrs. T. B. Holloman, Itta Bena, Parliamentarian.

It was moved and carried that the president, Mrs. Beals, have power to appoint vice-presidents from counties not represented. A chairman of publicity was to be appointed also.

It was moved and seconded that the dues for the Auxiliary be seventy-five cents this year.

Those who joined were: Mrs. T. B. Holloman, Mrs. L. A. Barnett, Mrs. W. G. Tabb, Mrs. L. F. Ferguson, Mrs. C. N. D. Campbell, Mrs. S. L. Brister, Mrs. J. C. Adams, Mrs. L. B. Otken, Mrs. B. B. Harper, Mrs. F. M. Sandifer, Mrs. T. B. Lewis, Mrs. J. E. Dunlap, Mrs. J. C. Pegues, Mrs. J. A. Beals.

Mrs. J. C. Pegues, Secretary.
Greenville, October 17, 1932.

BOOK REVIEWS

Mental Deficiency Due to Birth Injuries: Edgar A. Doll, Ph. D., Winthrop M. Phelps, M. D., and Ruth Taylor Melcher, M. A. New York, The Macmillan Co. 1932. pp. 289.

The purpose of the book is indicated by the title. It discusses mental deficiency due to birth injuries in general and twelve selected cases in particular. The work was inspired by a belief that some of these unfortunate children who are so badly crippled on the motor side, both as to general movement and speech, might have intellectual potentialities which were concealed by their isolation, and that such latent talent might be cultivated by specialized education.

From an institutional population of five hundred mentally deficient adults and children, twelve were selected for investigation; their ages ranged from three years and eight months to thirty-nine years and seven months; their I. Q.'s by the Binet scale varied from 31 to 94 on eleven. One could not be rated.

A comprehensive review is made of the scant work previously done in this particular field, but the major portion of the book carries detailed reports on the group which was studied. One might wish that the period of observation were longer. From the many systems which have been devised as a measure of mentality eight were selected and applied and a careful tabulation and comparison of results indicated that the Binet was the most satisfactory. Appropriate modifications had to be made in view of the defects of these subjects.

The patients with three exceptions presented spastic or athetoid conditions and treatment was largely by physical therapy—largely passive and active motion under controlled conditions with very little mechanical apparatus. The course is long and tedious and requires infinite patience but as physical improvement occurred the mental condition also improved. The study is extraordinary complete and the reports cover some two hundred and thirty-seven of the two hundred and seventy-five pages of the book. The wealth of detail will prove of much interest to specialists but will not be found very readable by the busy general practitioner. The book is a distinct addition to a neglected subject and sheds a ray of hope for pathetically crippled little children.

GILBERT ANDERSON, M. D.

Collected Papers of the Mayo Clinic and the Mayo Foundation: V. 23. 1931. Philadelphia, W. B. Saunders Co. 1932. pp. 1231. Price, \$13.00.

This, the twenty-third volume, consists of twelve hundred and thirty-one pages, with two hundred and sixty-five illustrations. Ninety-nine papers are re-printed in full, three hundred and ninety-nine are given by title only, while seventy-nine, chiefly of interest to specialists in some branch of pure science, surgery or medicine are abstracted or abridged.

Even though this method is employed this edition is rather lengthy, due to the voluminous

amount of work, research and clinical, put out by this institution.

Following the custom of previous years the material selected is of value not only to the diagnostician and general surgeon but also to the general practitioner.

This edition, like its many predecessors, full of "meat" and up to the minute, should find a ready place in any physician's library.

PAUL G. LACROIX, M. D.

The Healing Cults: By Louis S. Reed, Ph. D. Chicago, University of Chicago Press. 1932. pp. 134. Price, \$2.00.

This is a well written book relative to the healing cults, the most prominent of which are covered very thoroughly. The book should be read by every practicing physician.

ROY H. HARRISON, M. D.

A Text Book of Pathology: An Introduction to Medicine: By William Boyd, M. D., M. R. C. P. (Ed.), F. R. C. P. (Lond.), Dipl. Psych., F. R. S. C. Philadelphit, Lea & Febiger. 1932. pp. 946.

The author in his preface clearly indicates the purpose for which the book has been published, namely, as a text for students of medicine and graduates who have not specialized in the field of pathology.

The preface is really a splendid and logical presentation of the proper position which pathology occupies in the field of medicine. Its contents would really form a splendid introductory lecture to the medical student in the departments of medicine and surgery, as well as that of pathology. He clearly elucidates the erroneous misconceptions that some clinicians unfortunately possess in regard to the important subject of pathology; this applies particularly to the medical field, rather than that of surgery, since the surgeon's scapel is usually directed towards pathological lesions or neoplasia.

Prof. Boyd explains convincingly that the study of pathology is not confined to the post-mortem room or the laboratory, but that each sick person or patient embodies pathological lesions or physiological alterations that are expressed by the subjective and objective presentations of that individual and that a clear understanding of the morbid processes elucidates and explains the clinical case.

His general approach to the subject, his logical delineation of the various topics and the clarity of the index are most satisfying.

The causal agent of the disease and the resultant host response both from the tissue and immunological aspects are interwoven in careful sequence.

Allergy, atopy, anaphylaxis and hypersensitization, in general, are clearly discussed.

The relationship of the various vitamin deficiencies to the production of disease receives due consideration.

With the presentation of the pathology of the important diseases, a gist of the clinical picture is presented. The pathology is amply described and all modern conceptions are incorporated.

There are a considerable number of illustrations which are representative although not striking, in character.

There are sufficient basic references for further reading, but, as the author states, there is no intention of a replete bibliography.

It is the opinion of this reviewer that this text will prove of much value not only to medical students but to doctors of medicine who have received but little training in the field of pathology or are unmindful of the basic or fundamental dependence of medicine upon a substantial foundation of pathology and its allied branches.

WILLIAM H. HARRIS, M. D.

Nursing in Nervous Diseases: By James W. McConnell, M. D. Philadelphia, F. A. Davis Company. 1932. pp. 153. Price, \$1.50.

The author presents in this volume the substance of a series of conversational, clinical lectures delivered by him in the Philadelphia General Hospital to classes of nurses from that hospital and adjacent institutions.

The subject matter is presented in a series of fourteen chapters covering 150 pages of text illustrated with twenty-four engravings, and is indexed.

The first chapter is devoted to the description of the gross anatomy and physiology of the various parts of the nervous system. In the second chapter is found the definition of terms used in neurologic nomenclature, and in the third chapter is found a list of articles forming the contents of a neurological tray. The fourth chapter, under the heading of Physical Therapeutics, describes the therapeutic means, other than drugs, made use of in the handling of those affected with nervous diseases. The fifth chapter is devoted to features of unconsciousness (from a neurologic standpoint), resulting especially from head injuries and vascular lesions.

The remaining nine chapters are devoted to the following common nervous diseases: Apoplexy, epilepsy, diseases of the spinal cord, tabes dorsalis, poliomyelitis, neuritis, paralysis agitans, chorea, and neuroses and psychoses. Each of these chapters contains a brief description of the malady with a cataloguing of the most important symptoms.

At the end of each chapter are review questions which will be found most helpful to the student nurse.

Throughout, the nurse receives invaluable instructions regarding the handling of patients

suffering with these maladies. Particularly striking, are those instructions found in the last chapter, concerning the neuroses and psychoses.

The limited space of this work precludes the possibility of elaborating any details, and, therefore, we find missing, the minute anatomy of neurones and the neurone theory. The author has also found it impractical to include details regarding the use of psychotherapeutic means. This does not detract from the main purpose of the work, which is to instruct the nurse so as "to make life easier for both the student nurse and the patient suffering from nervous disease."

Neurologists and psychiatrists have frequently experienced the utter unpreparedness of nurses taking care of their patients. Here, therefore, is an opportunity for the correction of this evil, and the writer would urge all nurses who intend at any time to minister to the nervous and psychotic to equip herself with a copy of this book. This is a very valuable work, and fills a distinct want in the proper instruction of nurses, and should have a wide circulation.

L. L. CAZENAVETTE, M. D.

The Cardiac Output of Man in Health and Disease: By Arthur Grollman, M. D. Springfield, Ill., Chas. C. Thomas, 1932. pp. 324.

In the first part of the book the author takes up the different methods of the determination of the cardiac output in a very satisfactory manner.

Part Two is taken up with the determination of the cardiac output by the acetylene method, stating that this method is the one most likely to prove applicable to clinical cases. Other physiologists, however, state that the cardiac output is difficult to ascertain and perhaps uncertain; therefore, one may see the limitations of this study in clinical cases.

A statement is made in Part Three that in the author's experience, change in posture has relatively little or no effect on the cardiac output. This is at variance with other studies, which seem to show increased output in the recumbent position. The author explains this by the greater difficulty of obtaining homogeneous mixture in the lung-bag system when in the recumbent position, than when the subject is sitting or standing.

He finds that rise in cardiac output after meals varies from 0.5 to 2 liters in different individuals, a thing clinicians may well remember. Also, the practice of forcing fluids in fever, particularly where myocardial strain is already present, might appear to be bad practice. His findings seem to show that the blood pressure does not fall any lower during sleep than it does when the subject is fully relaxed and at rest. There is some difference of opinion on this point.

His study shows that psychic disturbances are capable not only of affecting the pulse and blood

pressure, but may have an appreciable effect on the output of the heart. This is well to remember in the handling of heart cases.

Chapter xvii describes the increased cardiac output seen in high temperatures and muscular exercise; the fact is also brought out that cardiac output does not rise immediately upon arrival at high altitude, but requires some days before it attains its maximum value.

In the chapter on the relation of cardiac output studies to pharmacodynamic problems, a short discussion of alcohol, coffee and tobacco is made.

Attention is called under digitalis to Stewart's work, to show that when administered to normal individuals it results in a decrease of the cardiac output, in a slowing of the heart, and a decrease in cardiac size by roentgen ray. In pathologically distended hearts, there was a decrease in size but the cardiac output was increased. These effects are due to increased muscular contraction. We think his suggestion, that digitalis is valuable in cardiac dilatation or marked arrhythmias and that its use, in other cases, may have a deleterious effect; therefore, should not be given indiscriminately. However, as Winckebach said: "Scientific evidence and reasoning, often only superficially accurate, cannot yet be counted the final argument for or against the administration of digitalis in a given case."

The chapter on Heart Disease brings out nothing new.

Under hypertension the author mentions the results of the work of Hayasaka, that indicates that in benign-hypertension the excessively high arterial blood pressure is maintained by an increased cardiac output, and is not the immediate result of any change in the volume of the vascular bed. This is of interest to think of in connection with cases of hypertension that have coronary occlusion, whose pressures stay down even after the patient is back at work. There is apparently a difference in cardiac output in the so-called nephrogenic and the essential types of hypertension. There is some variance of opinion in these questions.

Under hyperthyroidism attention is called to Vansi's work, that determination of cardiac output may be used to differentiate Graves' disease and the cardiac symptoms of the neurotic patient, the output being increased in the former and not in the latter.

In the latter part of the book he takes up the relation of cardiac output to metabolism, pulse rate, velocity of the blood flow, blood pressure and the size of the heart. The last chapter deals in a commendable way with the regulation of the circulation.

The reviewer thinks the book worthy of recommendation.

J. M. BAMBER, M. D.

The Curative Value of Light: By Edgar Mayer, M. D., F. A. C. P. New York, D. Appleton & Company. 1932. pp. 175.

The writer of this little volume of the Appleton Popular Health Series is medical director of the Northwood Sanatorium and the National Variety Artists Sanatorium, at Saranac Lake, N. Y. He is the author of "Clinical Application of Sunlight and Artificial Radiation," a treatise which, because of its technicality, is of significance only to physicians and research workers. His patients are constantly questioning him about sunlight, sun lamps, irradiated foods and so forth, and so he undertook the preparation of this work in which he presents in a simple and concise manner the chief facts concerning the use of light and its related products in health and disease as agents of prevention and cure.

There are chapters on the development of modern heliotherapy and of artificial sources, the physical characteristics of radiant energy, and its general action on the body, the sun-bath in health and disease, and the technic of exposure. The danger and signs of over-exposure are stressed.

The chapter on the value of light in bone substance-deficiency diseases (rickets, infantile tetany, osteomalacia, bone fractures and injuries, defective and carious teeth) is particularly well done, as is the next on light in relation to tuberculosis in connection with general treatment such as rest, food, outdoor air, climate and home treatment. The following quotation illustrates the sane point of view characteristic of the book: "We can state dogmatically that light can frequently cure one form of tuberculosis, namely, lupus vulgaris. . . . Up to the present, light cannot be said to be of any material help in pulmonary tuberculosis. . . . In the various other forms of tuberculosis light treatment can often play an important part in aiding recovery, and should be given due consideration."

Another chapter is devoted to the disputed claims of benefits ascribed to light in other diseases, such as the common cold and secondary anemia. Of skin diseases, the following is said: "On lupus vulgaris alone can ultra violet rays be said to act specifically. In other skin diseases (scrofuloderma, psoriasis, indolent ulcers, boils, acne, and so forth) local or general exposure to ultra violet radiation may have a favorable action, but the improvement which may result cannot be regarded as a specific effect of the rays. In some skin disorders (dry evzema, psoriasis, lupus erythematosus, herpes, freckles, atrophy, prematurely senile skin, and so forth), exposure to such rays may cause an unwanted reaction, provoke an attack or even produce other injurious effects."

The author has ably fulfilled the task he set himself and this volume will be of interest and benefit to the general public.

HENRY LAURENS, PH. D.

The Sign of Babinski: A Study of the Evolution of Cortical Dominance in Primates: By John F. Fulton and Allen D. Keller. Springfield, Ill., Charles C. Thomas. 1932. pp. 165.

In publishing this monograph the authors wish to point out both the value and the feasibility of using the higher primates for experimental studies on the central nervous system. They believe that the chimpanzee and its near of kin hold the solution to many problems which cannot be approached in dogs or cats, or even in monkeys, and they, therefore, feel obliged to record their first experiences with these animals—particularly with reference to their surgical handling—in some detail. In one respect also their work represents a new departure, for no one previously has attempted a systematic comparison of human reflexes, normal and pathological, with the corresponding reactions in representative primates below man. This approach has been particularly fruitful in the case of the Babinski reflex and they believe it will lend itself favorably to the study of other reflexes. More important, however, is the fact that it affords an experimental means of elucidating the evolutionary background of the human brain.

The book opens with Babinski's original description, including reproductions of the first and second pages of the original paper, and a brief résumé of previous experimental studies. There are chapters dealing with the reflex in the monkey, the baboon, the gibbon and the chimpanzee, after section and semisection of the cord, ablation of one motor leg area, or of both areas, and removal of one entire cerebral hemisphere. A summary at the end of each chapter gives the conclusions drawn concerning the sign in each animal.

The last chapter discusses the evolution of cortical dominance, the experiments having been carried out with the intent of elucidating the evolutionary background of the human brain. The primates studied in this investigation illustrate four well marked stages in the evolution of cortical control over the lower spinal centers. The degree of dominance in a given form is estimated by three important criteria: (1) The rate of recovery of voluntary power following a lesion of the motor area; (2) the extent of the depression of spinal reflexes produced by such a lesion, and (3) the occurrence and degree of persistence of pathological reflexes such as the sign of Babinski.

The chapter closes with a consideration of clinical conditions, cerebral diplegia, traumatic and congenital, Richard III of England being a victim of this abnormality, and of spinal "shock."

The book ends with a "word of caution . . . the study of the infra-human primates has taught the important lesson that in experimental neurology it is never safe to generalize from mice or marmosets to man. Levels of function important in the lower animals have had their activities pre-

empted by the rostral centers of the forebrain. In the cat and the dog, for example, the integrity of the vestibular nuclei is essential for preventing the symptoms of spinal 'shock,' but it is highly probable that these nuclear masses play a much more subsidiary rôle in primates; section of the vestibulo-spinal pathways in the spinal cord of a decerebrate cat will diminish rigidity on the side of the lesion, but this in itself does not justify a corresponding surgical procedure for rigidities and spasticities in man.

"Not only have levels of functions become modified in the higher members of the primate scale but one also can detect in the cerebral hemisphere the appearance of a more precise localization of function than in the lower forms. That a rat or a dog recovers the faculty of visual discrimination after removal of the occipital cortex does not constitute a reason for believing that man can make a similar adaptation. If, however, one compares corresponding lesions in a series of animals representing different stages of evolution of the central nervous system, it may then be safe, but only then, to predict the consequences of similar lesions of the human brain."

There are appendices on anesthesia, surgical technic, electrosurgical methods, surgical after-care and a bibliography of one hundred and fourteen titles.

The work is generously illustrated with photographs, strips of motion pictures, sketches and drawings. The artist "has caught the appearance of the living primate brain with an exceptional fidelity." The authors and publisher are to be heartily congratulated for having made such a notable contribution to neurology.

HENRY LAURENS, PH. D.

The Significance of Waterborne Typhoid Fever Outbreaks, 1920-1930: By Abel Wolman and Arthur E. Gorman. Baltimore, Williams & Wilkins Company. 1931. pp. 82. Price, \$2.00.

The increase in typhoid fever throughout this country in the past year has made particularly important a publication as this. The authors stress the point that waterborne epidemics do not occur if the most rigid control of the course, treatment, and distribution of water supplies is maintained. In order to substantiate their thesis, they consider the extensive epidemics that have occurred in the last ten years and explain how they happened. They also give a list of those waterborne outbreaks which have occurred throughout the United States in the last decade. The book is a thorough compilation of some extremely important data of particular value to the health officer of the state, county or parish, city or town.

J. H. MUSSER, M. D.

Nurses on Horseback: By Ernest Poole. New York, The Macmillan Co. 1932. pp. 168.

In the Ozarks, Alleghenies and Rockies, on islands and on lonely strips of coastland, in our vast forests and out on the plains nearly 15,000,000 of our American fellowmen and women are still living pioneer lives. Doctors are few and far between in these neglected outposts of what we regard as civilization. Good medical attention often cannot be obtained. The mountains and hills of Kentucky alone are inhabited by six million people in isolated and inaccessible places. The area of this mountain range is larger than the State of New York, and in many sections doctors are virtually unknown. Carious toothed haridans called "granny women," and unclean "salve doctors" who neither read nor write, who deliver cows and women and treat diseases of all kinds with teas and herbs, are entrusted with the medical care of the community. Public health service and sanitation are unknown, undreamed of. Modern methods and developments are frowned on and regarded with suspicion by the mountaineers, who dislike outside interference. Their ignorance is pernicious for withal they are a proud people. The pride is born of an idea that the length of time one's family dwells in the same place, no matter how unprogressive and uneventful their lives, gives one a right to be proud.

If you have read John Fox's stories of these Kentuckians you will probably wonder how anyone dared to penetrate into their midst and accomplish a service that in recent years has only been equalled in scope and effectiveness by the United States Public Health Service's epochal work in Haiti. Here was a ripe field, not in the Orient or the Tropics, but in the central part of our own glorious land. No sanitation, no education, pellagra, hookworm, tuberculosis, ignorant, dirty, proud men and women who, despite internecine strife, century old feuds with countless murders, high infant mortality, have not been able to annihilate themselves. What a morsel for a philanthropic gourmet!

The Angel of Mercy descended upon them seven years ago in the person of Mary Breckinridge. Her family, originally from Virginia, moved to Kentucky in 1790. Not content to build family traditions and pride merely on length of residence in Kentucky, the Breckinridges have a distinguished record. Her great-great-grandfather was attorney general for Jefferson. Her grandfather was Vice President of the United States, and Secretary of War for the Confederacy. Her father was an officer in the Civil War. When she set out to help the poor people of her state she carefully surveyed the situation, then prepared herself for the venture. First, she went through a splendid nurse's training school, then she went abroad and became a midwife, for she realized

that obstetrics would be one of her first problems. She assembled twenty-eight nurses and three superiors (all with training similar to hers) and established a small central hospital with eight outlying stations in lonely regions unreached save by mountain trail. All her nurses must be accomplished equestriennes. Through snow and ice, through thick underbrush, over rocky paths, they must ride. Rivers must be forded, and treacherous inclines conquered.

To finance such an undertaking, Mary Breckinridge went to various cities, lectured and sold her idea. The people of Kentucky helped but Kentucky is a poor state. Less than one per cent pay an income tax. The mountaineers themselves accept no charity. For all service they pay something—pigs, labor, potatoes, rarely money; they have none.

Magnanimous is the scope of her work. Obstetrics, general care of the family, transporting seriously ill patients to hospitals to be cared for by doctors, preventive medicine, all are included in their curriculum. Just as Frank Wilson had a traveling clinic giving injection for yaws so the nurses travel from place to place and under the supervision of the State Board of Health administer wholesale preventive sera and vaccines. The standard of rural education is being raised. Because nine-tenths of the land is still forest, experts from the Yale School of Forestry are imported to halt wasteful utilization and to teach the natives how to make the most of their natural resources. The value of such a constructive program is so obvious that even the mountaineers have been able to appreciate it.

Of Mrs. Breckinridge volumes could be written. Those who know of her work realize that she is destined to immortality. Inspired words, like the following, gain her numberless converts: "We have heard too much from our writers of late, of how this nation has left its youth behind and is on the road to decay. Some of them love to emphasize, in all their books and stories, degeneration in our life. But the vigor and youth of a nation is born again in its children, and most of all in the country districts. Fully eighty per cent, I am told, of the men who direct our great corporation, came from rural regions, mainly in the West and South. For Mother Nature has a way of reaching over rich nurseries to her own rough bosom and picking great men from the soil. And whether these men are to become wise and unselfish, as well as great, will depend largely upon the opportunities we share with them now, when they are small.

"So let us give such boys a chance. Help mothers to have their children well born. Remember that maternity is the young woman's battlefield. It is more dangerous, painful and mutilating even than war; but for her there will be no

trumpets or drums. Off on the lonely farmstead, where the true heart of America beats, the young mother faces her agony, that the hope of our nation may come into life. Who is taking care of Alaham Sizemore, down on Hurricane Creek tonight, when her baby is being born? On the answer hang the vital statistics of America, at their most vulnerable point. For her we need the Frontier Nurses—new pioneers on old frontiers."

MAURICE SULLIVAN, M. D.

Behavior Aspects of Child Conduct: By Esther Loring Richards, B. A., M. D., D. Sc. New York, The Macmillan Co. 1932. pp. 299.

Behavior Aspects of Child Conduct, Macmillan Co., by Esther Loring Richards, is a book that should fulfill a long felt want. She goes into detail in all the various psychic problems of childhood, taking into account the effect of physical and temperamental handicaps, discussing very thoroughly the environmental influence, and so on. All through it is replete with good common sense, mixed with technical knowledge. It would be a great comfort to psychiatrists, teachers and parents, as well as family physicians, if they would read it and digest the substance of it. It would be of especial benefit to the latter group in that she does what many books of this type do not do—she tells you what to do about it in a common sense practical way.

E. MCC. CONNELLY, M. D.

PUBLICATIONS RECEIVED.

W. B. Saunders Company, Philadelphia: *Diagnosis and Treatment of Diseases of the Thyroid Gland*, by George Crile and Associates.

F. A. Davis Company, Philadelphia: *Anatomy of the Brain and Spinal Cord*, by William W. Looney, A. B., M. D. *The Failing Heart of Middle Life*, by Albert S. Hyman, A. B., M. D., F. A. C. P.

D. Appleton & Company, New York: *Treatment of Syphilis*, by Jay F. Schamberg, A. B., M. D., and Carroll S. Wright, B. Sc., M. D.

The Century Company, New York: *Hospital and Child Health*, White House Conference on Child Health and Protection.

United States Government Printing Office, Washington: *Mortality Statistics, 1929. Thirtieth Annual Report.*

Lea & Febiger, Philadelphia: *Internal Medicine*, edited by John H. Musser, B. S., M. D., F. A. C. P.

Post-Operative Thrombosis and Pulmonary Embolism Before and After Lister. A Retrospect and Prospect, by Dr. Rudolph Matas. The Donald C. Balfour Lecture in Surgery, delivered April 5, 1932, 105th Anniversary of the Birth of Lord Lister, before the Medical Faculty of the University of Toronto. *University Toronto Medical Bulletin*, 10: No. 4, July 1932.

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PUBLIC HEALTH AND THE PRACTICING PHYSICIAN.*

W. S. LEATHERS, M. D.†

NASHVILLE, TENN.

When I received an invitation from my friend and former colleague, your President, I felt greatly honored to have been invited to deliver the annual address before this association. It is indeed a genuine pleasure to return and again come in contact with those with whom I was associated for so many years. I must confess that I have had conflicting emotions in determining the subject of my address. My first impulse was to give a technical discussion of some medical problem, but, in view of the continual agitation concerning the relation of the medical profession and public health agencies, I thought it would be of more general interest to present some ideas based on my knowledge and experience on the subject of "Public Health and the Practicing Physician."

There are no problems confronting the profession, the solution of which is of greater importance or more challenging to wise leadership than those involving a more adequate medical service for the rank and file of the people of our country and the maintenance of efficient state and local

health departments as an essential part of the scheme of medical practice.

More progress has been achieved in medical education in the past fifty years in the United States than during all preceding time. The present facilities for teaching medicine are unsurpassed and the medical student has more opportunities and greater advantages than ever before in the history of medical science. What significance should be attached to this remarkable progress in medical education? Does it not place the practitioner of medicine under greater obligation to render a more skillful and larger humanitarian service to mankind?

Likewise, great advances have been made during the past quarter of a century in public health organization and administrative practice. Not only have official health agencies been placed on a more stable and effective basis but numerous voluntary agencies have also entered the field of public health. Because of the remarkable results in the prevention and control of disease, the public has a broader vision and a more intelligent conception concerning the great possibilities of preventive as well as curative medicine. The laity is also rapidly acquiring the point of view that the modern physician should assume more definite responsibility for the application of hygienic and preventive measures in general practice. The physician of the future must become the family adviser on the maintenance of normal health.

If one can clearly interpret the trends in medical education and medical practice it

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is difficult to escape the conclusion that we are entering a new era in the practice of medicine. Readjustments in medical practice are inevitable and changes must be made in professional relationships if a more adequate medical service is afforded for groups of people differing in their financial capacity to secure proper medical supervision. Obviously these adjustments should be made with due regard for the ideals, initiative and independence which the profession of this country has always so highly prized in the practice of medicine.

There is unquestioned need for a better integration of preventive and curative medicine in general practice and a more sympathetic understanding between public health agencies and the practicing physician. I am convinced that medical schools can make a large contribution toward accomplishing this result by providing proper facilities for teaching the preventive aspects of disease. No medical student is properly educated unless he has a knowledge of the measures which may be employed in the preventive aspects of medicine. Much will be gained by developing in students a sympathetic attitude with reference to public health agencies. They should become familiar with the technic which is now available for the prevention and control of disease from the standpoint of the individual patient, the family, the home and its environment, the community, and the relationship which should be maintained by physicians toward official and non-official health agencies.

The officials of the American Medical Association have given considerable thought in recent years to the need for a better understanding between organized medicine and public health agencies, and on March 24, 1927, the third Conference on Public Health was called by the secretary with the approval of the Board of Trustees for the purpose of discussing subjects pertaining to the relation of the physician to public health. The objective of this and other conferences was to get a better under-

standing concerning the part which the practicing physician should play in the modern scheme of public health. In a stimulating and constructive paper by Doctor Arthur Holbrook of Milwaukee, the following statement was made: "In my opinion the medical profession leaves the work of the allied organizations, official and non-official, too much in the hands of the laity." Someone has said that "medicine has a poor vision when it comes to seeing socially," and the indictment is more or less true. There would be far less criticism to offer voluntary organizations if physicians, generally speaking, were a bit more far-seeing, if they sought membership and activity in these agencies, gave freely of expert medical advice, interpreted and explained technical aspects to lay members, gave talks before clubs and other groups to help educate the public in the objectives and activities of antituberculosis, Red Cross, prenatal and infant welfare, and like activities. On their side these organizations should realize that their greatest usefulness is attained when they supplement the work of the public health authorities and work in closer cooperation with them. Kipling's oft-quoted lines might well be made familiar to their members: "It ain't the individual nor the army as a whole but the everlasting team-work of every bloomin' soul."

I should like to digress somewhat at this point and refer to the relationship which has existed between this Association and state and local health departments. The people of Mississippi are fortunate in having the State Medical Association so closely identified, through its official board, with the work of the State Department of Health. This has afforded an opportunity for leaders of the profession to exert a sustained and definite influence in the upbuilding of public health activities. The Boards of Health of Mississippi have assumed their responsibilities in a serious and scientific way. I was associated with the Board for fourteen years

and I remember this experience with a great deal of satisfaction.

The Boards during this pioneer period were composed of physicians who were interested, cooperative, and who showed an understanding of public health needs of the state. If time permitted I would mention the physicians who have rendered valuable service on the respective Boards of Health during succeeding years. Membership on this Board is indeed an honor and affords an opportunity to render incalculable service to the people of Mississippi. During this period scores of other physicians have also given loyal support to the development of an efficient public health organization in Mississippi. This interest has not only continued but has doubtless increased during recent years. It is with particular satisfaction that I pay this tribute to the medical profession of the state.

It is of interest to recall that in 1924, the method of appointing the Board of Health was changed by legislative enactment providing membership from the medical profession from each Congressional district and one representative at large from the dental profession. The appointments are made upon the recommendations of the State Medical and Dental Associations to the Governor with the approval of the Senate. In my judgment no state has a better law for the selection of the Board of Health than has Mississippi. This fact has been commented upon by those who are in position to know the advantages accruing from this plan. This system serves to stabilize public health work by strengthening the hands of public health officials; and affords opportunity for the medical and dental professions to assume leadership in developing and promoting the scheme of public health which in their judgment will be most conducive to fulfilling the high purpose for which it is maintained.

The scheme for public health organization in the United States includes federal, state and local health services. The plan

of health work has been wisely developed for our form of government. Every state and local government unit is given almost unlimited legislative authority to assure health protection within its own territorial boundaries. The national public health service has well-defined and restricted powers and its functions in no way conflict with the prerogatives and powers of state and local health departments. An imperative need at this time is to effect a better coordination between the various bureaus and divisions of the federal government in the administration of public health work. The fact that the responsibility of the federal government for the protection of the public health has been made a function of a number of bureaus has led to confusion and clashes between official health agencies and the medical profession. The responsibility which the national government assumes in cooperation with the respective states for the protection of the public health should be headed up in the Public Health Service. This will unify effort, avoid overlapping, make for efficiency and simplify administrative procedure.

This would be a means of solving many of the problems arising in connection with maternal and infant hygiene service which was made possible under the provision of the Sheppard-Towner Bill. There is at present a bill in Congress for the purpose of re-establishing the maternal and infant hygiene work as a separate division in the Children's Bureau of the Department of Labor. The Committee on Public Health Organization of the White House Conference recommended that this work be done hereafter under the direction of the United State Public Health Service in co-operation with state and local health departments. This, I think, would be a much wiser procedure, and so far as I am personally concerned, I am committed to this plan rather than the procedure which was formerly adopted. A better coordination of the federal health activities is an urgent need and the organized medical profession

could make a definite contribution by supporting legislation which will place federal public health work essentially under the direction of the United States Public Health Service.

An official public health agency, whether federal, state or local, should not allow authoritative leadership to result in inaction. To the extent that an official agency uses all the arts and all the knowledge at its command and maintains an efficient service, it should be accorded loyal support and the right to survive. Official authority should never be regarded as a base on which to stand but rather as an incentive to go forward. The future of public health in this country depends on strengthening and perpetuating official health agencies. This is fundamental. Therefore, when any non-official agency through unwise and misdirected leadership loses sight of the fact that public health work is primarily a function of the government and should have an enduring permanency, it becomes a hindrance rather than an aid in the advancement of the public welfare.

There are certain phases of public health work which are especially well adapted toward working out a cooperative program between public health agencies and the physicians of a community, county or state. It is well, however, to recognize the fact that there are in every state, county and city many varying factors, both personal and environmental, which will influence individual opinion. It is therefore not within the province of this or any other group to devise an iron-clad system. A plan of cooperation which is well adapted to one community may not be acceptable to another, but there are certain salient principles which are indispensable and should be observed in health supervision of children, in periodic physical examinations, in the use of immunizing agents, in the administration of health centers and clinics, in the reporting of births and deaths and in the control of communicable diseases.

Nation-wide interest has been stimulated

in the health of the child through the activities of the White House Conference on child health and protection, and as a consequence, studies have been made to emphasize the appalling need for proper health supervision of children of preschool and school ages. A definite demand is also being made for more adequate health supervision of expectant mothers and infants. With a view of supplying this need health centers have been organized in communities; these are educational and afford a splendid means of giving the mother some conception of the value of accurate scientific knowledge concerning the health of herself and child. An important activity in conducting health centers and the follow-up work of public health nurses is to get expectant mothers to seek the advice of a physician prior to the sixth month of pregnancy. At the health centers, advice relative to hygienic measures and instruction for feeding are given, and, with proper follow-up work by the nurse, the parent becomes more conscious of her responsibility in the proper rearing of her child. The purpose of these centers should not be to divorce children from the medical supervision of the practicing physician, but rather to redirect the interest of the mother so that as soon as possible the child will be given health supervision by the family physician. By frequent conferences and mutual understanding between health agencies and private physicians, procedures can be developed which will insure much larger results in parental and infant welfare work than would otherwise be possible.

Systematic physical examination of preschool and school children has become an established function of health agencies, while treatment and the correction of physical defects is the responsibility of the practicing physician, either in his private capacity or as head of the clinical service in a hospital. Children with correctable defects discovered by means of physical examinations in school or health centers should invariably be sent to their family

physicians and dentists for further examination, advice and treatment. It is only by a cooperative attitude between the personnel of the health department and the physicians of a county that comparable results can be obtained in corrective work.

Thus, if defective vision is found, the physician and the public health nurse can urge the necessity of early and proper correction; if there are infected tonsils, the necessity for the removal of acute or potential foci of infection; if a question of malnutrition, the desirability of determining whether the underlying cause is physical defects, parasitic infestation, or bad health habits; if defective teeth, the need of consulting a dental surgeon; and if an orthopedic defect, the importance of securing advice from an orthopedic surgeon. An invitation is, or always should be, extended to mothers urging them to be present at the examination of their children. In this way the examining physician can impress upon the mothers the necessity for systematic health supervision, or the value of a periodic physical examination of the child. The great need in this practically unsupplied field of medical service will serve as no other phase of public health activity to blend the interest of the public and the profession for mutual benefit.

Much stress has been placed in recent years upon the necessity for a periodic physical examination of people forty years of age and over. These examinations are designed to detect any evidence of early functional disturbance before there is physical inconvenience, interference with work or anxiety which impels the person to seek medical advice for the treatment of recognizable pathology. To facilitate this movement it would seem possible for the health department to act as the promoting agency in cooperation with the state and local medical societies in providing diagnostic clinics for the examination of adults who are apparently well. These clinics could be conducted as a demonstration in educating the public relative to the value

of periodic physical examinations. I do not believe that large results will be obtained in the promotion of this important movement without a more definite cooperative plan between the state and local health departments and practitioners of medicine. Both should be mutually interested in adopting some method which will impress upon the laity the value of an annual physical audit or examination. The great mass of citizens who are most in need of this service will be slow to respond except by ocular demonstration.

Some physicians question whether or not, in the absence of an epidemic outbreak, the health officer should or has the right to use immunizing agents to prevent such diseases as diphtheria, typhoid fever and smallpox. The health department is obligated by law to prevent and control in every possible way the infectious diseases in a community, and it is well within the province of a health officer to employ the immunizing agents which are made available by scientific research. It is, therefore, not a question of whether he has the right or should use such preventive measures but a matter of accomplishing the largest possible results in their use. Of course, no wise health officer would project a campaign for immunizing persons against these diseases without securing, if possible, the participation of physicians. Health officers have made strenuous effort with varying degrees of success to achieve this objective.

Notwithstanding the legal and professional obligation of the official health agency to immunize against disease, this is also an important function of the physician, and I am confident, that if the profession would actively assume this responsibility the health agencies of this country would gladly concede to them this privilege. If each physician would educate his clientele to bring children to him for vaccination against smallpox at the age of three months, for immunization against diphtheria at nine months and against typhoid fever at two years, a gain

would be made in controlling these infection. Moreover, revaccinations are necessary, and each year there is a new group of susceptibles who could in this way be systematically immunized. I believe that all will agree that the child should not be denied this protection, and that in any event a plan should be followed which will cause a sufficient number of persons to respond so as to make immunization of measurable public health value. For example, in a recent study it was found that if 30 per cent of children between the ages of one and five and 50 per cent between the ages of five and nine are immunized against diphtheria a definite reduction in the disease occurs; otherwise, the results may be disappointing. If there is a mutual understanding between the organized profession and health departments such work can be done so as to better enlist the interest of the laity and the consistent support of physicians.

Health centers or clinics have caused conflicting conditions between public health agencies and practicing physicians in some communities. The term "health center" has been used variously by public health authorities and it would appear to mean any special provision for health protection of the public from a clinic for expectant mothers to a community hospital. As applied to the work of health departments, it has reference particularly to diagnostic procedure and advice concerning hygienic measures. A health center may be used for treating indigent persons, especially those who have tuberculosis or venereal disease. A public health clinic when used for the correction of physical defects of children may be temporary or permanent, and should invariably be operated with the endorsement and cooperation of the county or district medical society. In some rural communities corrective clinics for children have been organized and the county medical society has chosen the clinician to do the necessary operative work and allowed him

to charge and collect his fees in the usual way. Health centers and clinics should be administered when possible so as to integrate the medical service with the routine practice of the local physicians. The methods employed must not interfere with the relation that has so long existed between the physician and the patient and which on the whole has been satisfactory to both; but, on the other hand, the confidence of the public in the practitioner can be increased. The patient should be required to select his own physician; and he must have the right to study and prescribe for his patient, based on his own experience and knowledge.

There are many counties in the average state in which there is no provision for doing corrective work of school children, and it is only a question of time, when some uniform plan will be developed in the respective states for this purpose. Physicians should assume leadership in developing such a plan and, if possible, cooperate with health departments in affording the child population the health protection which is so much needed in this field of medical service.

The administrative ability and specialized training of a health officer must always be recognized as an important factor in successful administrative public health practice. There will be no difficulty ahead in establishing the proper reciprocal relation between health departments and the medical profession in the upbuilding of the public health in a community or state; provided, there is at the head of such service a trained person, and one who is imbued with the ideals and purposes of scientific medicine. We need men in these positions who are not influenced by party or partisan politics and who endeavor to consider each problem from a professional point of view.

The health officer should be in sympathy with medical practice and acquainted with the problems and difficulties with which the practitioner is confronted. He should

safeguard the professional interests of physicians in the dispensaries and clinics and secure the cooperation of the public by referring cases for treatment to the family physician. Personally, I think, that health officers, generally speaking, endeavor to carry out this objective. Any health department which does not fully appreciate the relationships which should be maintained with physicians is doomed to failure regardless of the degree of efficiency attained and the worthiness of the cause presented. In an address by Doctor William H. Welch of Johns Hopkins University this ideal is effectively emphasized by the following statement: "There can be no real and lasting success of efforts to promote the health of the people and to prevent disease without the active sympathy, support and participation of the medical profession."

It is a source of gratification that there has been a wholesome cooperation in Mississippi between the profession and the state and local health departments. This should be so when it is the policy of your state health department to consider with equity the welfare of the medical profession and the laity, and with due regard for traditions and ethical principles underlying the practice of medicine. Mississippi may be ranked as one of the twelve states which have the best public health organizations in the United States. The public health organization of this state has made progress under the leadership of Doctor F. J. Underwood and his associates, and I feel particular pride in the thought that, as State Health Officer, he has not only maintained the efficiency of the organization but he has also extended the activities of local health service in an effective way. I am sure that in considerable measure his success has been due to the fine cooperation which has been given by the medical profession.

One of the outstanding problems at present in the promotion of public health

in this country is to make more secure the tenure of position of well-trained state and local health officers. Health departments are scientific institutions when properly evaluated and their work must be developed and maintained on this basis. The remuneration of an experienced and well-trained health officer is never commensurate with the service which he renders to the community. It is, therefore, imperative that his position be made attractive and that he be given opportunity to administer a health department on a scientific basis rather than from a political point of view. The removal of an efficient health officer for political reasons alone should be an impossibility in any state or local unit of government. Doctor John A. Ferrell, director of health work in the United States for the International Health Division of the Rockefeller Foundation, made the statement to me that Mississippi had the best state board of health law of any of the states, and he also commended in the highest terms the law for the establishment of county health departments. Such laws are for the purpose of stabilizing state and local health services; but the maintenance of a high level of efficiency in state and local health services will depend largely upon the intelligent interest and loyal support of the organized medical profession.

In the discussion of this subject, I am deeply conscious that it is not possible to consider many phases of this question which merit attention. I have at least attempted to present ideas that are of practical importance and which may be suggestive of administrative practice that will bring about a better understanding and a more cooperative relationship between public health agencies and the practitioner of medicine. I have not referred to the contributions which health departments make to the practice of medicine nor the many ways in which physicians individually serve health departments. I have not considered the "rights" of the physician

because, I think, that the traditions of the profession do not admit of claiming special rights if it is a question of preventing disease and giving adequate care to the sick. Physicians, however, have certain privileges and prerogatives which must be respected and safeguarded in order that they may use in the most effective way their knowledge and skill for the alleviation of human suffering and prevention as well as treatment of disease. Neither have I referred to the large amount of charity work which the profession does as a routine performance because we have come to recognize, whether justly or not, that within reasonable limitations this service may be considered the heritage of medical practice.

I do not care to go into the vague bugaboo of "state medicine" especially, because it seems to me that the agitation of this matter by physicians will subserve no purpose except to warn against a system, the adoption of which can be avoided only by a statesmanlike and constructive attitude on the part of physicians in the prevention of disease and in providing more adequate medical service for all classes of people. The fact is, I have never seen this term properly defined, but in general it implies the organization and control of the practice of medicine by the state. This means that all physicians would be placed on a salary and would be largely dependent upon political or corporate interests. I followed this question for many years with some degree of interest and I can see no trend in this country toward actual political control of medical practice. There is, however, no question but that there is a definite trend toward the socialization of medicine. This means developing some system which will more adequately supply medical service to all classes of people, and without detriment to the medical profession. This is inevitable, and whether we want to or not we must look this fact squarely in the face and realize that with

the dawn of a new era in the physical reconstruction of civilization there will be new adjustments between the medical profession and society. Unfortunately, some physicians have placed the odium of "state medicine" upon the activities of public health agencies or have ventured to express the point of view that such work will ultimately lead to "state medicine." This position cannot be successfully defended.

I rather like to think of the relation of the medical profession toward public health agencies in the language of Doctor DeWitt Stratton who in the memorable address on the occasion of his inauguration as President of the New York County Medical Society said: "We pledge our unqualified support to any movement in the interest of public health and general welfare of the community. We are convinced that in the long run such a movement will always react toward improving both the social and economic status of the physicians in a community, just as contrarywise we feel that any movement which is inimical to the profession is harmful to the public. Much more vital than this, however, is the fact that, after all, prevention of disease as well as the care of the patient is a basic idea and ultimate ideal of our calling and therefore the primary responsibility of our County Society."

The medical profession has been largely responsible for the establishment and extension of public health agencies in this country, and whatever adjustments may be made for providing a more adequate medical service, the maintenance of public health activities on an efficient basis will always constitute a part of the scheme. Whatever changes in medical practice are necessary, the wise physician will face them with confidence, and with altruism, realizing that the medical profession has won a permanent place in society based upon service and that it is only by keeping the true ideal of service that this position can be maintained.

GOITER.*

A Brief History of Its Surgery and a Review of
128 Operated Cases in a "Non-Goiter" District

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NEW ORLEANS.

One of the most interesting developments in the field of surgery is the progress of attacking by operation the diseased thyroid gland. Thyroidectomy, a procedure formerly looked upon with the disfavor and fear merited by one with a mortality as high as forty per cent, has within the last ten years achieved one of the honor places in low mortalities among major operations.

Goiter must have existed as long as diseases have affected the human race. The ancient literature leaves us little record of this affection, or it is so confused with other things as scrofula that it is not possible to distinguish it in these writings.¹ In a work questionably attributed to Hippocrates on "the glands," *nepi adevov*², an account is given of scrofula, which was said to be a lodgment of humors in the glands of the neck. Cervical lymphadenitis was not differentiated from goiter at that time.

Galen³ wrote of two glands in the neck in which moisture is generated. Thomas Wharton⁴, 1656, gave the thyroid gland its name. Celsus, as reported by Mandt¹, is supposed to have operated on goiter, and Albucasis¹, is reputed to have been the first to actually extirpate the thyroid in the year 330. The record of this is clouded with some improbability, and Hildanus wrote that in 1596 an empiric operated for a goiter with resultant death of the patient and imprisonment of the surgeon⁵.

Desault⁶ was one of the first to successfully remove a goiter (1792). He later attempted a second case, but had to discontinue the operation because of hemorrhage.

Dupuytren⁵ operated for goiter in 1817. The patient died thirty-five hours after operation.

One of the remarkable early achievements in this field of surgery was by Hedenus⁷. In the first part of the nineteenth century, he removed six goiters successfully. In his paper, he quotes Wickman as saying that to operate for goiter is equivalent to cutting off the patient's neck and states that he undertook the operation because of the existing danger to the patient of suffocation and also "to show my students what the operator who has courage, determination, composure, perseverance and patience and who is equipped with adequate anatomical and surgical knowledge can accomplish, even in the severest cases, with the bistoury, for the good of mankind."

Up until 1861, only 106 attempts had been made to extirpate the thyroid⁵, and the mortality was in the neighborhood of forty per cent. These goiters were huge adenomatous growths which were producing such severe pressure symptoms that they were slowly choking to death their hosts and the attempts at removal were last heroic measures. Hemorrhage and infection were the two main impediments to successful operative removal of the thyroid. As late as 1883, Billroth⁸ said "If we were compelled to cut through the middle of the gland, we would be confronted with a quite uncontrollable hemorrhage." In Bell's Surgery⁹, 1804, he describes the methods then in vogue of ligating vessels. The common procedure was to pass a ligature around the mouth of the bleeding vessel with a curved needle, or if the vessel had retracted into the tissues, a crooked needle was employed to catch the end, pull it out and so hold it until a ligature could be applied. Bell also wrote, "For the purpose of performing this with ease, various types of forceps have been invented with which the divided arteries are laid hold of so as to admit of ligatures being applied." So, although they had hemostatic forceps, Hal-

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Fig. 1. Method formerly used in ligating arteries (From Günther's *Lehre von den Blutigen Operationen*, 1859). It is easy to comprehend the difficulties encountered in dealing with hemorrhage from the thyroid gland at that time.

sted⁵ tells us that these did not come into the general vogue that they have today until the middle of the last half of the nineteenth century. The use of the aneurysm needle and sharp hook was extremely inadequate in contending with a gland as vascular as the thyroid, which is normally, in proportion to its weight, the most vascular tissue in the body.

In the years prior to antiseptic surgery, cervical cellulitis and mediastinitis were serious contenders for the life of the patient. Infection was the cause of the death in 6 of 8 fatalities in Billroth's¹⁰ pre-antiseptic series of 20 extirpations of the thyroid gland, and some of the patients who recovered prior to the work of Lister, had severe postoperative courses, resulting from infection. Hedenus⁷ cites such a case which recovered.

Three names stand out preeminently in the development of surgery of the thyroid—Billroth, Kocher and Mikulicz. Billroth (1829-1894) had the happy experience of working before, during and after the development of antiseptic surgery. Between 1860 and 1869, he did 20 extirpations of the thyroid gland with 8 deaths¹⁰, a mortality of

forty per cent. He used other procedures for goiter; puncture and drainage of cysts; puncture and injection of iodine solution; cauterization; tenotomy of the sternocleidomastoids to relieve pressure symptoms and subcutaneous breaking up of goiter tissue. In the years immediately following the introduction of antiseptic methods, Billroth's mortality for extirpation dropped to eight and three tenths per cent (4 deaths in 48 cases, 1877-1888). His operation consisted of an enucleation of the gland. He encountered postoperative tetany¹² but his patients did not get myxoedema, probably because he left the isthmus and adjacent portion of the lobes⁵.

During this period, the nature of tetany was not understood. In 1883, Weiss¹³ collected 13 cases and from his studies, concluded that the lesion was in the cells of the central nervous system as a result of trauma to numerous nerves in the region of the thyroid. Nor at the same time was it appreciated that part at least of the thyroid was essential to health and that the condition which sometimes developed post-

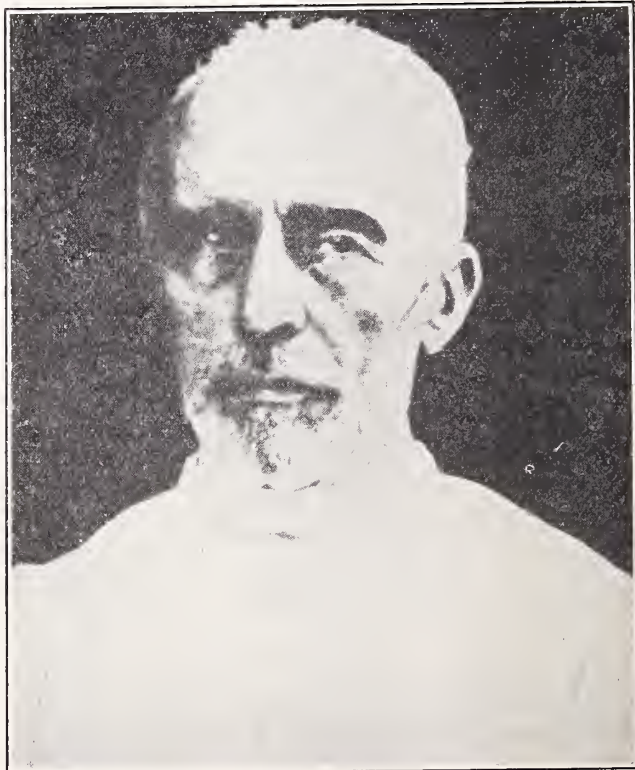


Fig. 2. Theodor Kocher. The outstanding figure in the development of surgery of the thyroid. (From Garrison's *History of Medicine*).

operatively, slowness of thought and motion, mental apathy, and non-pitting edema, was due to a deprivation of too much of the essential secretion of the thyroid gland.

Kocher ultimately recognized that total extirpation resulted in what we now know as myxoedema and devised an operation similar to the one used today, except that he commonly did a unilateral lobectomy and continued to do so, even as late as 1914⁵. In 1897, he was employing the curved collar incision in those cases where the cosmetic result was a consideration¹⁴. Prior to this, the incisions were usually longitudinal or angulated with one end in the suprasternal notch, the other high up at the anterior border of the sternocleidomastoid¹⁵. The collar incision was used by Boeckel in 1880¹⁶.

Mikulicz made as important a single advance as had up to his time been accomplished. Prior to him, surgeons were afraid to cut through the parenchyma of the lobes and either did an extra or an intracapsular enucleation, turning up the lobe and ligating the pedicle *en masse*. Mikulicz¹⁷ (1886) found that he could control the hemorrhage, even if he cut through the parenchyma of the gland and ligated the bleeding points. He realized the advantage of removal of part of the tissue of each lobe in bilateral enlargement and he devised an operation similar to the one we use today, a bilateral partial resection.

Prior to the success of Billroth in the early antiseptic period of surgery, nothing was known of the function of the thyroid and parathyroids. Sick¹⁸, in 1867, made a report of a case of total thyroidectomy. His patient postoperatively developed symptoms suggestive of the condition we know today as myxedema. This was the first case report of postoperative struma thyreoprivia. Kocher later encountered this condition but at first he did not realize that it was due to too little of the essential secretion of the thyroid gland.

In 1878, William Ord¹⁹ wrote, "On myxedema, a term proposed to be applied to an

essential condition in the cretinoid affection occasionally observed in middle aged women." Ord described five cases. They had not been operated on. He gave the symptoms of each case in detail and thought he found an increase in mucin in the skin. He believed that the jelly-like state of the connective tissue was the fundamental factor in the disease and that the nervous disorders were consequent thereon. Ord introduced the term myxedema with the intention of designating mucous edema.

In 1887, Möbius²⁰ called attention to the points of similarity and difference between myxedema and Basedow's disease and suggested that as in myxedema it was a question of cessation of function of the thyroid gland; in morbus Basedow, it was diseased action of the thyroid.

In 1891, Gley²¹ showed that the parathyroid glands were essential to life and later, Vassale and Generali (1896) studied the function of the parathyroids and showed their relation to tetany²².

Murray²³, in 1891, made one of the most important therapeutic advances by finding that if he fed extract of thyroid gland to patients with myxedema, the symptoms would disappear and the patients would revert to their normal selves. In his article, he shows a striking picture representing the appearance in one of his cases before and after treatment.

By the beginning of the twentieth century, the veil had been lifted from a very dark chapter concerning an apparently obvious surgical disease which up until a few years before had derided the surgeons with its prominence. America had followed distantly up to that time, but that which had been explained opened again new problems for exploration and since then, this country has shared the honor of contributing in large measure to the development of our knowledge of the thyroid. Halsted⁵ was one of the pioneer goiter surgeons of this country and his work did much to relieve the undue fear of thyroidectomy. He devised an operation based on the Kocher-

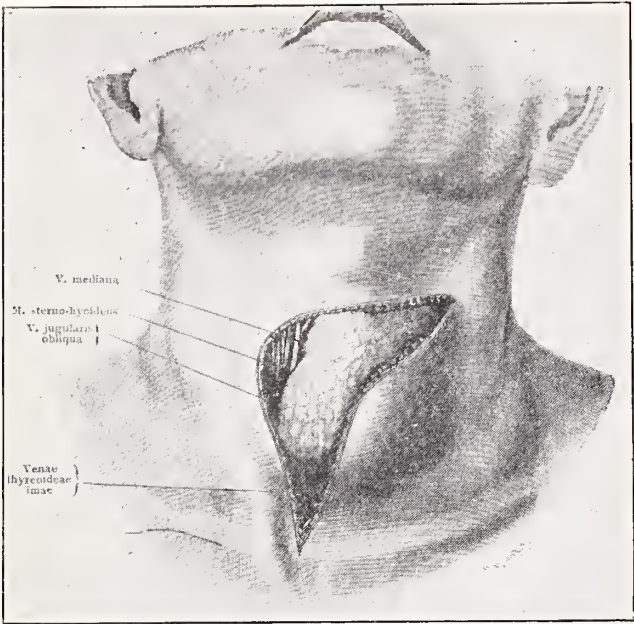


Fig. 3. The angle incision. (From an article by Kocher, 1897). At that time Kocher recommended this incision except when the cosmetic result was a consideration. Then he used Boeckel's collar incision.

Mikulicz method of resection and was one of the first to advocate local anesthesia. Moreover, he left an excellent monograph on the history of this subject which has served as a guide to the more important papers and on which I have based authority for many statements.

Crile, by his theory of anoci-association and of avoiding shock to the patients, did much to reduce the mortality in operations for hyperthyroidism.

C. H. Mayo^{24, 25, 26, 27, 28} was another of the pioneer goiter surgeons of America and early had a large number of operations to his credit. Today, Pemberton, Lahey, DeQuervain, are names often seen or heard in connection with surgery of the thyroid.

Although investigations in metabolism date back to Lavoisier²⁹, it was a long time before tests were used to assist in diagnosing diseases of metabolism. Frederick Muller³⁰ was the first to show that the metabolic rate was increased in hyperthyroidism. Magnus-Levy³¹ in 1895 showed that the gaseous exchange was increased in Basedow's disease and he found that patients who had recovered from Basedow's disease had a normal rate. From 1892 to

1908, calorimetry was used only experimentally in this country and it came into general clinical use between 1912 and 1917^{30, 32}.

In 1908, Wilson³³ reported a large series of cases in which he correlated the pathologic and clinical findings. Later (1913) he³⁴ was able to state that every exophthalmic goiter is accompanied by parenchymatous hyperplasia of the thyroid. At the same time, Henry Plummer³⁵ was studying the clinical aspects of goiter and was able to differentiate two types of hyperthyroidism; exophthalmic goiter and hyperfunctioning adenomatous goiter. This has been of great value to the surgeon, for in the former condition, a certain percentage of recurrence must be expected, but in the latter, only the offending adenoma or adenomas have to be removed to produce complete and lasting relief. In correlating the clinical and pathologic findings in a large number of goiters, Plummer^{35, 36, 37} was able to form a clinical classification, which is one widely accepted in this country today:

CLINICAL CLASSIFICATION OF THYROID DISEASE		
Diffuse Colloid Goiter (Adolescent Goiter, Parenchymatous Goiter)	}	Endemic Goiter Group
Adenomatous Goiter without Hyperthyroidism (Simple Goiter; Non-toxic Goiter; Struma)		
Adenomatous Goiter with Hyperthyroidism (Secondary Hyperthyroidism; Basedowized Goiter; Struma Basedowificata; Formes Frusts)		
Graves' Disease or Exophthalmic Goiter (Basedow's Disease)	}	Hyperthyroid Group
Malignancy		
Adult Myxedema (Hypothyroidism)		
Infantile Myxedema (Sporadic Cretinism)	}	Thyroid Insufficiency Group
Endemic Cretinism (Seen so little in America that an attempt by us to subdivide into types is not justified)		

Iodine has long been known to have some

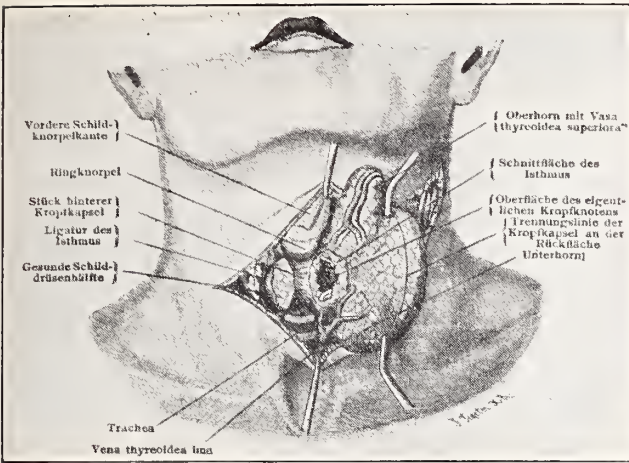


Fig. 4. An illustration from an article by Kocher, 1897. A curved collar incision has been used and the left lobe of the thyroid has been elevated. Aneurysm needles are passed through the parenchyma in ligating the arteries.

beneficial effect in goiters. Roggerio of Salerno is said to have recommended burned sponge^{38, 39}, and in Cooper's Surgery (1835)⁴⁰, we read, "The good effects of burned sponge have now been ascertained to depend upon the iodine which it contains. Dr. Coindet of Geneva has employed various preparations of the latter substance with far greater success than ever resulted from the use of other medicines."

It remained for Plummer to clearly demonstrate what a tremendous beneficial effect iodine has in exophthalmic goiter in preparing patients for operation, in controlling crises and in reducing mortality from operation with the result that such procedures as hot water injections and preliminary ligations have been almost completely discarded. Plummer³⁹ started the routine use of iodine as a preoperative measure in March, 1922. Because of this method of preparation, the mortality rate for operations for exophthalmic goiter dropped from four and fifteen hundreds per cent (Pemberton, 1929)⁴¹.

In recent years, more safeguards have been added to thyroidectomy. The time selected for operation is an important thing in severe and long standing cases of hyperthyroidism. The abolishment of the old method of doing any operation on the thy-

roid under ether and the popular use of local anesthesia for part or the whole of the operation have been distinct advances. Pemberton emphasizes the use of an anesthetic from which the patient may be awakened quickly between the lobectomies that they may cough to inform the surgeon of the condition of the recurrent laryngeal nerve on the first side. The introduction of the oxygen tent or chamber has mitigated against postoperative hyperthyroid crises and deaths from pneumonia⁴².

INDICATIONS FOR OPERATION

We read in Agnew's Surgery⁴³, 1883, "Extirpation of the thyroid gland is one of the most formidable operations in surgery and should be undertaken only when other means of treatment have been exhausted and only when the dyspnea is growing progressively worse and the danger to life becoming imminent." The operative mortality of five tenths to one per cent reported by clinics throughout the country today have obviously remarkably changed these rigid indications for operation given by Agnew.

The indications for operation on the diseased thyroid are local or general or both. Pressure symptoms, interference with breathing or with deglutition need not become marked to demand operation. The longer an enlarged thyroid remains, the more the trachea is affected. It is pinched and eventually becomes narrowed like a scabbard. Interference with deglutition is not infrequently experienced by the patient. It results from direct pressure of the enlarged gland on the gullet or because of indirect pressure through the trachea. A very small adenoma may give patients marked discomfort and they feel grateful when it is removed. Enlargements which become conspicuous may well be removed for a cosmetic effect as well as other factors which would influence one to operate. The scar need not be very large and if it is properly

placed, it is not noticeable except on close scrutiny.

Toxic goiters should all receive surgical consideration. If they are allowed to remain, irreparable visceral damage may ensue. The end stage of an exophthalmic goiter is evidenced by jaundice, emaciation and the signs of cardiac decompensation. The liver is badly damaged. It is small and has the appearance of the liver of subacute yellow atrophy. Needless to say, patients with exophthalmic goiter suffer the agony of having themselves slowly, painlessly burned

lost after a period of a few months and a severe exophthalmic goiter will often not respond as well again. Hence, one advantage so strongly emphasized by Goetsch⁴⁵ and others⁴⁶ of operating at the time when the benefit from iodine is first received.

On what type of goiter is surgery not necessary? Between the ages of fifteen and twenty, simple colloid goiter is not uncommon. The incidence of it might be diminished by the administration of iodine, and many times, the enlargement of the gland will subside under iodine therapy. Glands



Fig. 5. Murray was the first to use thyroid extract in the treatment of myxedema. This shows the appearance of one of his patients before treatment (Oct., 1891).



Fig. 6. Same patient shown in Fig. 5 seven months after treatment with thyroid extract (June, 1892).

up, and the results from surgery are so satisfactory, ninety-five per cent receiving some benefit²⁷, that they must be strongly urged to seek that relief. A series of 57 cases of exophthalmic goiter treated medically were reported by Ord and Mackenzie⁴⁴. The patients either died or were observed for five years: 14 died, 24.5 per cent; 10 recovered completely, 17.5 per cent; 28 improved; 4 still sick; and 1 alive but condition not stated. This series was studied prior to the days of the use of huge doses of Lugol's solution. But it is well known that the striking results from the administration of Lugol's solution are often

which produce neither local symptoms nor toxic symptoms do not necessarily indicate surgery, but it is well to remember that the nodular thyroid is like the nodular breast; until the eye of the microscopist is upon it, it is not possible to tell whether it is malignant. Of all operated goiters between 1910 and 1926 at the Mayo Clinic, one and six tenths per cent were malignant⁴⁷, a surprisingly high figure.

REVIEW OF 128 CASES

I have reviewed the cases operated on for goiter at Charity Hospital in the two-year period between October 1, 1931, and Octo-

ber 1, 1929. The cases group themselves as follows:

Simple colloid goiter	21
Adenomatous goiter without hyperthyroidism	37
Adenomatous goiter with hyperthyroidism.....	37
Exophthalmic goiter	31
Carcinoma of thyroid.....	1
Suppurative thyroiditis	1

Total 128

Females, 115; Males, 13; Ratio, 8:76 to 1.

Whites, 72; Negroes, 56.

SIMPLE COLLOID GOITERS

21 Cases.

Males	3
Females	18
Whites	15
Negroes	6
Average age of patients.....	28.8 years
Average duration of goiter (computed from 13 cases in which records were adequate)	7.3 years

ADENOMATOUS GOITERS WITH HYPERTHYROIDISM

37 Cases.

Average age	35.5 years
Negroes	16
Whites	21
Sex	All females
Average duration of goiter (computed from 20 cases in which records gave sufficient data)	8.9 years
Average duration of toxic symptoms....	3.2 years
Average duration of goiter before toxic symptoms	5.7 years

ADENOMATOUS GOITERS WITHOUT HYPERTHYROIDISM

37 Cases.

Average age	38.3 years
Females	29
Males	8
Whites	20
Negroes	17
Average duration of goiter (computed from 28 cases)	5.4 years

EXOPHTHALMIC GOITER

31 Cases.

Age—youngest	16	years
oldest	55	years
Average age	34.2	years
Females	29	
Males	2	
Whites	15	
Negroes	16	
Duration of goiter and symptoms, computing from 17 cases in which patients noted both goiter and toxic symptoms:		

Average duration of goiter..... 2.54 years

Average duration of toxic symptoms 2.45 years

Computing from 26 cases in 10 of which the patients mentioned the toxic manifestations but not the goiter:

Average duration of toxic symptoms 1.89 years

Computing from the same 26 cases and substituting in the 10 cases in which patients did not complain of the presence of goiter the same figure for duration of goiter as they gave for their toxic symptoms:

Average duration of goiter..... 1.94 years

The longest duration of goiter and toxic symptoms was 12 years; the shortest 1 month.

COMMENT

In the two-year period of time between October, 1929, and October, 1931, there were 277 goiters treated at Charity Hospital, medically and surgically. During the same period, a total of 86,488 patients were treated at the hospital, ratio 1 in 312.23. Goiter is not rare nor is it very common in this locality.

It is interesting to compare the age of patients with toxic adenoma in our series with the figures given by Boothby⁴⁸ for the Mayo Clinic. In this series, the average age was 33.5 years, approximately 14 years younger than his. Moreover, his patients with adenomatous goiters and hyperthyroidism had goiter for an average of 19 years before coming for treatment; in this series, the average duration of goiter was 8.9 years. The average age which he gave for exophthalmic goiter to come for surgery in four series varied between 33 and 38 years; this series showed an average of 34.2 years.

His figures are collected in a goiter belt whereas in this section, the incidence of goiter is very much lower, a non-goiter district.

The average duration of toxic symptoms in adenomatous goiter with hyperthyroidism is greater (3.2) years) than it is in exophthalmic goiter (1.9 years).

SUMMARY

This paper comprises a brief history of the important steps in the development of

surgery of the thyroid and a review of one hundred twenty-eight goiters operated on at Charity Hospital, New Orleans, within the last two years.

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DISCUSSION.

Dr. Alton Ochsner (New Orleans): There are several points I should like to emphasize, which Dr. Mahorner did not because of lack of time. One is the importance of preoperative medication and the limiting of iodine therapy to preoperative and postoperative medication. At the present time in this country, iodine is being used rather extensively otherwise than as a preoperative measure, and, as a result, we are seeing, specially in the goiter belts, patients who become iodine-fast. If this continues, it is only a question of time before we will have an entirely different type of goiter.

As Dr. Mahorner has emphasized, the operative mortality since the introduction of iodine by Plummer has been reduced from 4 and 5 per cent to less than 0.5 per cent in the best clinics, but if iodine therapy is used promiscuously except as a preoperative measure, we will again have a high mortality rate from these cases.

I agree with Dr. Mahorner that there is a distinct difference between Grave's or Basedow's disease and the hyperthyroidism which is associated with adenomas. Even though there is considerable controversy at the present time, as Dr. Mahorner has indicated in his paper, these diseases are differentiated as regards prognosis. The extirpation of an encapsulated adenoma will cure the patient, whereas radical extirpation or subthyroidectomy in Grave's disease results in recur-

rences in from 4 to 5 or even higher percentages of cases. These two processes are fundamentally and clinically different.

A new classification, suggested by the Society for the Control of Goiter and which Dr. Musser has outlined in the *New Orleans Medical and Surgical Journal*, is as follows:

Non-toxic diffuse goiter.

Toxic diffuse goiter.

Non-toxic nodular goiter.

Toxic nodular goiter.

Dr. Ambrose H. Storck (New Orleans): Following the introduction of Lugol's solution for the preparation of thyrotoxic patients, there was a shift away from multiple stage operations in hyperthyroidism. As a result of this over-confidence in, or over-estimation of, the protection afforded by iodine, the mortality in goiter operations was not reduced to the present low level until multiple operations, and in some instances other methods of treatment, were resumed; this time in conjunction with iodine administration.

Dr. Louis Levy (New Orleans): I think it is well to have shown in this particular paper that there are a great many goiter cases in Louisiana, which is outside of the goiter belt.

In 1912, I heard a paper read before the society entitled "A Case of Goiter Operation and Recovery," showing how dangerous goiter was in ordinary hands at that time. In 1912, there were in the hospital clinic about 20 cases of goiter that had been operated on by me, much to the surprise of many men in this Society who at that time thought goiter could not be operated on successfully. I went to the Crile Clinic, and my inspiration comes from there, where the Crile technic is used. Crile has done a great deal in bringing his technic to a nearly perfect state.

I feel very grateful to Dr. Ochsner for calling attention to iodine-fast goiter. A great deal of harm may be done in making the patient iodine-fast. Cases come to us that have had numerous doses of iodine and we cannot tell what we are going to do with them when the metabolic rate remains persistently high in spite of iodine treatment.

Dr. Mahorner (closing): I am sorry I did not have time to say more about iodine therapy in the treatment of goiter. It is certainly one of the things that has helped to reduce the mortality in the last few years, and I think it one of the recent advancements we should all appreciate.

As regards the prolonged use of iodine in the treatment of toxic goiter: Jackson and Ewell, De Courcy, Goetsch, and numerous observers have contended, and nobody has denied the fact, that if you give the patient suffering from exophthal-

mic goiter iodine over long periods of time, these patients become iodine-fast, i. e., they do not react to iodine in the same manner as when it is first given, and when patients come to operation after prolonged use of iodine, they are deprived of the tremendous beneficial effect which they would have received from a short course of iodine before operation.

In recent years, several other advances have been made in surgery of the thyroid that might be mentioned. One is to abstain from the use of anesthetics which put the patient in a sound sleep from which they cannot be awakened readily, and use a local anesthesia for the whole or part of the operation. Pemberton and others recommend the use of an anesthetic from which the patients may be awakened easily between lobectomies so they may cough or talk, and thus the surgeon may know if he has injured the recurrent laryngeal nerve. Any kind of anesthetic such as intravenous amytal or avertin or ether which puts the patient to sleep so that you cannot awaken him between lobectomies is contraindicated. Gas or local is the type of anesthetic to be preferred. The vocal cords should be checked for function before and after thyroidectomy. If you do not know the condition of the nerve on the first side and if you have injured it and proceed to the second side and injure that, the chances are you will lose the patient and anyway you deprive him of his voice for life. If one realizes the nerve is not functioning on one side, he will proceed much more cautiously on the sound side.

On Pemberton's service at the Mayo Clinic we used to give patients with hyperthyroidism amytal in 6 gr. doses by mouth before operation, twenty minutes before going to the operating room. This makes them drowsy and relieves them of fear and apprehension. After the operation, the patient who has received the amytal by mouth is quiet, not nauseated, and not apprehensive; while a patient equally toxic who has not received amytal by mouth has a restless and anxious reaction, frequently with nausea and vomiting.

Something that has not been fully adopted down here yet is the use of the oxygen tent, or chamber, which makes a tremendous difference in thyroid surgery. If a hyperthyroid crisis develops, you put the patient in the oxygen chamber and within a few hours the rapid pulse, fever, cyanosis, and nervousness and restlessness abate and the patient is very much benefited. Oxygen mitigates against the development and progress of respiratory infections. It should be administered postoperatively whenever there is cyanosis or severe hyperthyroidism or when there is incipient bronchitis or pneumonia.

THE SEDIMENTATION RATE OF ERYTHROCYTES:

BRIEF HISTORY AND DISCUSSION OF THEORIES. APPLICATION IN GYNECOLOGY.*

ADOLPH JACOBS, M. D.,†

NEW ORLEANS.

Until Virchow's new theory of cellular pathology which brought about a great change in medical research, the separation of the red blood cells from the plasma was known to Hippocrates and Galen as the *crusta flogistica* or *crusta inflammatoria* because of the buffy color of the separated plasma. This phenomenon which was considered as a bad prognostic sign was the only blood symptom known and played a most important part until the end of the eighteenth century. John Hunter, in his treatise on the blood inflammation and gunshot wounds, published in 1797, mentions it. He observed it in the shed blood of patients, blood letting being then a universal therapeutic measure. Johannes Muller and Hermann Nass continued the work of Hunter, and from 1830 to 1840 this problem still agitated the minds of investigators. After this date, now and then, mention was made of this peculiarity. In 1897, Biernacki discussed it before the Congress of Vilna and concluded that the red cells settle much more rapidly in non-defibrinated than in defibrinated blood. He was the first investigator to mark that the sedimentation velocity of the red blood cells was rapid in diseases. O. Claude, in 1908, demonstrated that a rapid sedimentation occurred in the anemic blood but not until 1917, when Fahraus of Stockholm, working in the physiological laboratory of the University of Kiel, published experiments concerning the velocity of the red blood cells in the citrated blood of preg-

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nant women in comparison with the non-pregnant, that this peculiarly neglected phenomenon was heralded with great enthusiasm like all new procedures in medicine. In his article he stated that the velocity of the sedimentation of red blood cells in women is rapid. He experimented both *in vitro* and *in vivo* and noticed that by applying a constrictor to the forearm, thus isolating a portion of a vein and by holding the forearm vertically for fifteen minutes, puncturing the superior segment of the vein, only the plasma was recovered, while puncturing the inferior segment, blood rich in globules was obtained. After the publication of Fahraus' findings the literature, more notably the German, was flooded with articles on this subject. In gynecology, Linzenmier and Maccabrium, and in other fields of medicine, Plaut, Runge, Buscher and others took up the work and confirmed Fahraus' findings. In the United States, Friedlander was probably among the first to take up the work.

THEORIES

Many have been the speculations and experimentations concerning the various phases of this phenomenon and to enumerate the theories advanced as to its causation, would far transcend the scope of this paper. I shall, therefore, confine myself to the most essential points of these theories and to a statement of their clinical significance of the practical application of this test.

There are four outstanding theories:

1. Fahraus and Hoeber claim that it is due to a change in the electrical charge of the red blood cells which normally are charged negative, thus they repel one another.

2. Plaut explains this phenomenon by an increased auto-agglutination which he thinks is due to an increased fibrinogen content of the plasma.

3. Sachs attributes it to a variation in the stability of the plasma in which globu-

lin and fibrinogen are the most changeable components.

4. Others claim that there is an increase in the viscosity of the blood and an increase in the specific gravity of the cells.

DISCUSSION

In diseases the colloids of the plasma undergoing dehydration and lysis are composed of larger molecules than the other usual colloids of the blood, thus there is a diminution in the cohesive power between these molecules making up the plasma. These colloids also have a greater power of absorption for the alkaline salts in the plasma and thus the negative charge of the red blood cells is diminished which is conducive to a more rapid agglutination of the cellular elements of the blood. In other words, in those conditions in which these two colloids, globulin and fibrinogen are increased in the plasma, the surface tension of the latter is lowered with a more rapid agglutination of the red blood cells and thus a more rapid sedimentation. Fahraus does not attribute the influence of the phenomenon to either fibrinogen or globulin as chemical entities but attributes it to physio-chemical state of either. The followers of Hoeber showed that these different proteins exert different influences on the electrical burden of the corpuscles and that the negative burden is greater in albumin than globulin solutions, consequently if globulin replaces albumin, the iso-electric point is approached and a more rapid sedimentation occurs. Plaut's idea of auto-agglutination is favored by some who argue that the suspension stability of the blood does not depend entirely on the specific gravity of the erythrocytes or the viscosity of the plasma, as shown by the fact that the erythrocytes of the fibrinated blood require four to six times longer to settle than do the red cells of citrated blood of the same person. It is known that the defibrination of the blood does not change the physical character of the red blood cells or the viscosity of the plasma. Friendlander, therefore, believes

that the variation in time of blood sedimentation is explained by the auto-agglutination theory of deHaan and Plaut, especially since it can be noted in rapidly sedimenting blood that the erythrocytes take a rouleau formation and present clumping and the reason for the agglutination property of the red blood cells is because of their viscous surfaces coming in contact with another. When we consider these theories, the question presents itself to us as to why there is no contact between the erythrocytes in normally circulating blood since the red cells move in the normally circulating blood at equal distances from one another. Huber explains this as due to decrease or loss of the electrical charge of the cells. He used a finely constructed glass tube filled with diluted blood and attached both ends to electrodes and noted that the erythrocytes migrate to the anode pole which showed that they are similarly charged and therefore repel one another to uniform distances. The variation in the stability in the colloids of the plasma is explained by the fact that in diseases certain catabolic products formed in the tissue act upon the cell membranes of the capillaries and tissue cells, increasing their permeability to protein and it is, therefore, suggested that the lymph fluid is increased in protein content by diffusion of protein from the cytoplasm of the tissue which it surrounds and that the lymph fluid having become higher in protein than the normal plasma, subsequently loses protein to the plasma, thereby increasing the total plasma protein. As a concrete example of experimentations along these lines, I might cite: Popper and Kreudler who fed 400 gm. of milk to two groups of patients. In Group I, with diseased liver cells the sedimentation time was rapid because the diseased liver cells allow to pass into the circulation, not properly digested proteins in the form of protamin, histones or peptones; in the second group of patients with jaundice from a mechanical obstruction, but the liver cells not

damaged, the sedimentation velocity was slow.

EXPERIMENTS

As to the particular constituent of the blood that is responsible for this process, various experiments have been made in order to ascertain whether it is due to special properties of the plasma or the red blood cells or both. Frosch mixed thoroughly the serum of a slow sedimenting blood with the red cells of a rapidly sedimenting blood and the result was a slow sedimentation and vice versa. This, I have frequently had occasion to confirm in my own experience. William Starlinger added kaolin, which absorbs fibrogen to a blood whose sedimentation velocity was very rapid and found that the sedimentation velocity of the blood was diminished. By adding cholestrin on the other hand, he was able to obtain a rapid sedimentation. The addition of lecithin diminished the sedimentation velocity. Other substances that have the power of absorbing protein particles such as hydroxide of iron or other positively charged colloids have been added with the result of a diminution in the sedimentation velocity. Bucher and Maccabrium claim that the phenomenon is largely of plasma origin because of the fact that if the globules are washed and suspended in saline, they sediment much slower than in the plasma regardless of the origin of the blood. Linzenmier contends that, while both the plasma and the red blood cells exert a certain influence on the velocity, there are other substances besides fibrinogen which determine the sedimentation rate since it is known that even after defibrinating the blood there is still a difference in velocity between the different kinds of blood.

From the foregoing, then, one must conclude that the phenomenon is not well understood, that the sedimentation velocity of the erythrocytes is influenced largely by a change in the protein particles and the diminution of the surface tension of the plasma whereby the red blood cells through

a reduction or loss of electricity undergo a change in their suspension stability.

FACTORS INFLUENCING THE SEDIMENTATION VELOCITY OF THE RED BLOOD CELLS

1—Age and sex. Linzenmier ranges a scale of the sedimentation velocity in the human being from the lowest in the blood of the umbilical cord, male, female, pregnancy and diseases.

2—Temperature exerts an influence on the sedimentation rate. High temperature accelerates it; low temperature retards it.

3—Position of the tube. The more inclined the tube containing the citrated blood to be tested, the more rapid the sedimentation rate. Maia has carried out some interesting experiments concerning the above two conditions.

4—Acceleration of the rate is influenced by active digestion.

5—Buerker has shown that the sedimentation velocity is inversely proportional to the erythrocyte count. The more numerous the red blood cells, the slower the sedimentation and the less the red blood cells, the more rapid. Therefore, when drawing blood for the test, a constrictor should not be allowed to remain too long because long stagnation tends to increase the corpuscular content and allows carbonic increase in the blood which alters the test. This fact concerning the concentration of the red blood cells, particularly emphasized by the German workers is not properly allowed for in many presentations of the clinical material especially in this country. In many of the diseases discussed, anemia is not infrequently present and if the effect upon the test is to be studied adequately, an attempt should be made to differentiate the effect of the secondary from the primary one. Rubin states that changes in cell concentration and cell volume affect any method of estimating the sedimentation time now in use and this should be taken into account when such readings are interpreted. He suggests that such errors produced by variations in cell concentration could be corrected by the results being

expressed as the ratio between sedimentation rate and cell volume.

6—Repeated blood taking from the same region would alter the sedimentation rate. This would probably have something to do with an increase in fibrin from frequent punctures.

7—Ernest Pohle has shown that irradiation of blood with unfiltered rays influences the suspension stability. A certain minimum dose is required to cause a retardation of sedimentation rate.

8—Menstruation affects the sedimentation velocity of the red blood cells.

TECHNIC AND SOLUTIONS USED AS ANTI- COAGULANTS

Various substances have been used as anti-coagulants in the study of the sedimentation test. Biernacki used calcium oxalate. Potassium oxalate, 3 drops of a 20 per cent solution that is allowed to dry, in conjunction with the blood taking for specimen for blood chemistry is used by Cooper. Rourke and Plass recommend 1 mg. of heparin for 5 ccs. of blood as an ideal anti-coagulant as it has no effect on the settling velocity other than keeping the blood from clotting. The most commonly used anti-coagulant, however, is a sterile sodium citrate in 2.5 per cent or 5 per cent solution. Fahraus, Linzenmier and Friedlander prefer the sodium citrate.

Several methods have been advocated in carrying out this test. Westergren and Fahraus measure the plasma column at various millimeter levels. Cooper and Rubin used different technics. They expressed the results as the ratio between the sedimentation rate and cell volume. Kriele in a recent article describes a specially constructed chamber in which the citrated blood is placed and examined under the microscope; the sedimentation time, the red blood cell, and the platelets count and the leukocyte clumping are estimated, and by this, he is able to differentiate between a pyemia and a septicemia, prognosticate the outcome of the disease and apply the proper treatment.

Linzenmier's technic, which is most commonly used, is as follows:

With a two cc. syringe, equipped with an ordinary hypodermic needle and in which has been drawn .2 of a 5 per cent solution of sterile sodium citrate, the vein is punctured and the blood drawn to the 1 cc. mark. The citrated blood is mixed by inverting the syringe several times. I may add that in my own experience, I use .4 cc. of the sodium citrate and draw blood to the 2 cc. mark for the reason that if some of the blood is lost in transferring it from the syringe to the pipette, it would not necessitate another puncture. The citrated blood is transferred into a pipette, 35 mms. in length and 5 mms. wide and graduated into 6, 12, 18, and 24 mms. Blood is put exactly to the 1 cc. mark, then is allowed to stand. The time it takes for the top of the red blood cell column to reach the level of the 18 mm. mark is noted. This method is simple and sufficient for practical purposes.

PRECAUTIONS TO BE OBSERVED

1—Syringe and pipette must be perfectly clean and dry.

2—The solution of citrate must be fresh and sterile.

3—The constrictor shall not be allowed to remain long for reasons already discussed elsewhere in this paper.

4—The pipette must be placed in perfect perpendicular position in ordinary room temperature.

5—If the reading was neglected or uncertain, the specimen should be mixed thoroughly again and another reading taken.

6—If the blood coagulates it must not be used. This occurs if the tubes are not clean or dry or have been washed in water containing lime salts.

7—Blood for the test should not be taken sooner than two hours after a meal.

WHAT IS THE NORMAL SEDIMENTATION TIME?

There has been a great deal of confusion in the method of reporting the sedimentation velocity. Some report the time it takes the top of the column of the red blood

cell to reach a certain level; others, the distance that the cells fall in a certain time. Up to the present time, there is no standardized method. Westergren, by his method, considers as normal, a plasma column of 15 mms. in one hour. Friedlander made the test on the basis of the time required for the sedimenting of erythrocytes in over 300 healthy persons, male and female. In the male, he found the sedimentation time to be from a 1000 to 1200 minutes and from 600 to 1000 minutes in the female. His findings differ somewhat from Linzenmier's. Friedlander considers a sedimentation of 2 hours or over as normal.

CLINICAL SIGNIFICANCE AND PRACTICAL APPLICATION OF THE TEST

Briefly, the sedimentation time is an index of the degree of absorption of catabolic products from a bacterial infection or degenerative tissue cells. A rapid sedimentation indicates pus or an inflammatory process or an absorption of toxic substances generally. A persistent rapid sedimentation is indicative of a very acute condition. A gradual diminution in sedimentation velocity means that there is a gradual subsistence of the process. When the sedimentation becomes slow, it indicates that the inflammatory process is completely encapsulated and from this point of view, I think it is of greater value than the leukocyte count and the temperature chart. Not infrequently, all of us have encountered pelvic pathology much more acute than either the leukocyte count or the temperature indicated. When leukocytosis and fever are present, we know that there is an infection, but in cases where the physical findings and the leukocyte count suggest no complications, the sedimentation time is an index of the presence and the severity of the infection. A repeated slow sedimentation then is of value to rule out an active or latent inflammatory or degenerative process.

VALUE AS A DIAGNOSIS TEST

The test is not a specific one. Its value as a diagnostic test is only relative. To

employ the test in an attempt to differentiate between adnexitis and appendicitis would be absurd, but it would be of value to differentiate between a non-complicated ectopic and an inflammatory disease of the adnexa. When the typical symptoms of salpingitis or ectopic are present and the onset of recent date, a slow rate would be indicative of an unruptured ectopic, a rapid rate would mean tubal infection. A ruptured ectopic would give a rapid sedimentation time because of the peritoneal irritation by the blood and the anemia present.

In pregnancy, the sedimentation does not become rapid until a general biological reaction takes place—that is, after about the third month, and even then the test could be used for differential diagnosis from a tumor only when there is no disintegration of the questionable tumor or the presence of an inflammatory condition elsewhere in the body. After an operation, the sedimentation velocity is rapid for two or three days, due to absorption from traumatism and chemical changes due to anesthesia, then it gradually slows up. However, should it remain rapid or increase in rapidity after a period of slow velocity, we are warned at once of an impending complication such as: wound infection, peritonitis, pneumonia, etc.

MYOMA

In a simple fibroid, the sedimentation rate is slow, but in myoma with degeneration it is rapid in direct proportion to the amount and severity of degenerative process.

PUERPERAL SEPTICEMIA

When the sedimentation is persistently rapid or of increasing rapidity, the prognosis is grave. Two examples:

A—A woman with a post-abortion septicemia, admitted with a sedimentation time of 8 minutes, which remained rapid, died on the sixth day after admission in spite of all treatments.

B—Another woman with a post-abortion septicemia and positive blood culture, was admitted with a sedimentation time of 20 minutes. After a blood transfusion and the administration of streptococci serum, the temperature dropped from 103° to 100° and the sedimentation rate decreased

to 40 minutes. Forty-eight hours after the blood transfusion, the temperature again rose to 102° and the sedimentation time to 25 minutes. Twenty-four hours after another blood transfusion and the administration of anti-streptococci serum, the temperature dropped to 100° and the sedimentation time to 45 minutes. From this time on, the sedimentation became slower and ten days later before the patient left the hospital, the sedimentation time was 110 minutes.

CARCINOMA

In very early carcinoma of the cervix where there is no secondary infection present, the sedimentation time may be two hours or over, but a carcinoma of the cervix with a secondary infection will show a rapid sedimentation. In an advanced case, the sedimentation is rapid in direct proportion to the amount of tissue involved. In connection with carcinoma, I might add, where other factors that affect the sedimentation have been eliminated, a rapid sedimentation in a granulated and bleeding cervix which one may readily be led simply to cauterize, should always make the gynecologist suspicious of a carcinoma regardless of the patient's age.

After application of radium, a gradual diminution of the sedimentation velocity means no further involvement or at least a temporary arrest. A sudden increase in the velocity means that the disease is progressing. To cite a case of my own:

A woman 26 years of age commenced radium treatments September, 1926. After nine months of periodical treatment, during which time she received 6000 mg. hrs. of radium, gained 29 pounds. At the commencement of the treatment, the sedimentation time was 25 minutes, gradually the rate slowed to 130 minutes. A year later, the sedimentation was 80 minutes and the patient was beginning to lose weight. Vaginal examination revealed an infiltration on both adnexal sides. In December, 1929, the sedimentation time was 35 minutes. A roentgenogram of the lumbo-sacral region showed metastasis in the vertebrae. Patient died in June, 1929.

CYSTOMAS

In simple cystomas, the sedimentation velocity is slow, but in complicated or papillary cystomas, particularly in the recurrent type, the sedimentation time is very rapid.

ADNEXITIS

In the inflammatory diseases of the adnexae, the sedimentation test is of

especial value and importance from the fact that it serves to guide us in pending operations. What I mean to convey is that in cases in which an operation is indicated and the leukocyte count and the temperature are normal but the sedimentation rate rapid, the wise surgeon will refrain from operating because he will rightly conclude that the disease is still active, notwithstanding the fact that the leukocyte count and the temperature are normal. Of course, in all such cases, care must first be taken to exclude the possibilities of other foci of infection.

A case in point is one in which a woman, twenty years of age, admitted to my service for the third time for an inflammatory disease of the adnexae was persistently having a sedimentation time of thirty minutes. Provocative bi-manual examinations which revealed masses on both adnexal sides were not followed by either a rising temperature or a count above normal. A thorough search for some other focal infection was not successful for ten days until the patient complained of a slight soreness around the gingival margin in the area of the upper right canine and adjacent incisor teeth. Although the visual examination displayed healthy and clean looking teeth, roentgenogram disclosed apical abscesses of both teeth which were removed and six days later, the sedimentation time was 140 minutes.

As to the sedimentation time which makes operation safe, Friedlander has established two hours as the minimum requirement.

CONCLUSIONS

1. The sedimentation test is more sensitive than the temperature chart or the leukocytic count.

2. In gynaecology, it is most valuable as an indicator of the safety or unsafety in pending elective operations of the pelvic organs.

3. In fibroids, paradoxical as it may seem, it is both of value and of no value. As an indicator of a degenerative process in the fibroid, the test is valuable, but it cannot be relied upon as an indicator of safety as regards an operation, owing to the fact that a rapid sedimentation caused by a degenerative fibroid does not contraindicate an operation.

4. No curettage, Rubin test or transuterine lipiodol instillation should be undertaken without a prior sedimentation test in order to exclude definitely the existence of a quiescent infection.

5. The sedimentation test can best serve its purpose when correlated with a clear history, a thorough local and general physical as well as laboratory examination, and is properly interpreted.

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DISCUSSION

Dr. Leopold Mitchell (New Orleans): I should like to emphasize the value of the sedimentation test, particularly in inflammatory conditions of the uterine adnexa. When you are guided by this test, it is conceivable that you may withhold operation when the cause of rapid sedimentation is outside of the pelvis. If you do, your patient would have no cause to regret it. But if you went into the pelvis in the face of rapid sedimentation, due to inflammation in the pelvis, there might be plenty of reason for regret.

As one grows more familiar with this test, it should prove valuable in surgical conditions outside the female pelvis. I recall reading the statement that in obstructive jaundice it is the most valuable guide that we have as to postoperative bleeding. It certainly is of value as regards the virulence of infection. I believe in certain cases of appendicitis, particularly those in which it is a question of whether the patient should be operated on or whether chance would be bettered by delay, that it would be a valuable guide while waiting to determine if the patient were gaining or losing ground.

Dr. Rudolph Matas: The subject presented by Dr. Jacobs in his paper is one of great interest to me, as it should be to all surgeons and, in fact, to all practitioners. The erythrocyte sedimentation rate as an index of the suspension stability of the blood is a test of great clinical value in many pathologic states, and particularly in determining the hemic reactions of the organism to injury and infection. The subject is the more interesting since the value and advantages of this reaction have been sadly neglected, at least until quite recently, in our local practice and in our laboratories.

Dr. Jacobs deserves great credit for doing this work himself in his private laboratory and in the midst of a busy practice. In this he has set an example worthy of imitation.

The sedimentation or sinking rate of the red cells is only a new test or gauge of disease insofar as its modern application and interpretation are concerned. For centuries and as long as bleeding was a universal panacea for all evils, and long before hematology had been established on a scientific basis, the erythrocyte sedimentation rate was utilized in a gross empiric way as an indicator of disease.

The peculiar appearance of the blood, known as the "buffy coat," the "size," by the English writers, the "couenne du sang" by the French, and the "speckhaut" by the German writers, or more classically, in the language of the schools, as the *crusta inflammatoria* or *phlogistica*, is a visible abnormality in the blood which conveys the same meaning to the clinician whether this

is exhibited in a cup or basin of shed blood or in the minute calibrated and graduated glass tubes of the modern laboratory worker in determining the sinking rate of the red corpuscles. The ancient clinicians and phlebotomists of the seventeenth and eighteenth centuries, and up to the first half of the nineteenth, attached enormous diagnostic and prognostic significance to the buffy coat long before the relation of the red cells of the blood, or any notion of their sinking rate, could have entered into their speculations as to the mechanism of its production.

When the pale yellow or buff colored layer of fibrin appeared on the surface of the clot, or clotting blood shed by the phlebotomist, it was always interpreted as a sign of disease. Not only was it regarded as a positive manifestation of disease, but the substance (fibrin) which constituted the "size" was regarded as the cause of the disease itself, the "peccant material" or *materies morbi*, which, accumulating in the blood, made its appearance as a floating scum on the surface of the clot. So great a clinician as Sydenham (1753), in accordance with the humoral doctrines of his time, believed that the common cause of all febrile diseases was an inflammation of the blood, the pathognomonic sign of which was the size or buffy coat.

And the theoretic argument in favor of blood letting was founded on the conception that, by emptying the blood vessels of their contents, the organism would be relieved more or less of the *materies morbi* as this was seen in the buffy coat.

Later, with the progress of chemical and morphologic hematology, it was demonstrated that the inflammatory crust was not a newly formed substance, foreign to the organism, but merely the coagulated fibrin separated from the rest of the blood (Hewson, 1772). Later still, it was shown that the buffy coat was due to the sinking of the red corpuscles before the plasma had had time to coagulate.

We know, as in the past, that the buffy coat does not form in healthy individuals in whom the red cells sink slowly and uniformly with the process of coagulation of the plasma, the clot thus remaining evenly red without leaving a yellow fibrinous layer on the top. It was not until a lapse of a hundred years that this most significant phenomenon was again brought to light, literally resurrected from the dust of ages, by the researches of the great Swedish pathologist Faehraeus, who, while investigating the blood of pregnant women (1916), established the relation of the buffy coat to the erythrocyte sedimentation rate. And it is only since his time that we have learned that the red cell sinking rate is one of the most sensitive reactions of the organism in the presence of injury and disease—comparable in its sensitiveness and significance to the leukocyte

count, though even more recognizable as a visible phenomenon and more constant in its manifestation.

In pregnancy, contrary to the rule, the increased sedimentation rate (the buffy coat of the ancients) is not a reaction which appears subsequent to injury or disease but an indicator of a defensive preparedness in anticipation of the trauma, the hemorrhage, and the possible infection of parturition and the puerperium.

A singular fact, which was not then interpreted in its true meaning, is that pregnancy is the only physiologic state in which the buffy coat appears in the blood. We now know that the erythrocyte sedimentation rate is progressively accelerated from the second to the ninth month of gestation, and only returns to normal after delivery and the puerperium. The ancients, not aware of this fact, bled the unfortunate women, often unmercifully, believing that they were sick, because each time they were bled for any reason the size appeared in the blood.

The advent of Virchow's cellular pathology (1850) was the signal for the downfall of the humoral doctrines which had dominated the pathogeny of disease up to that time, and with this the universal practice of blood letting rapidly fell into disuse. With the suppression of phlebotomy, the great importance previously attached to the buffy coat likewise fell into unmerited oblivion.

Dr. Jacobs has indicated and stressed the importance and the value of this reaction in gynecologic practice, and I have nothing to add to what he and Dr. Mitchell have said.

It is regrettable that, despite the vast literature which has accumulated on this subject since Faehraeus first brought it to light, we have been slow here in utilizing it in our laboratories and clinical practice.

While every phase of the subject is important, my interest in the red sedimentation rate lies in a different direction than that especially considered by Dr. Jacobs. What particularly concerns me as a general surgeon is the relation of the sinking rate to the problem of post-operative thrombosis and embolism. At the present moment, when the causes of post-operative complications and sudden death from pulmonary embolism are engaging the attention of thinking and experienced surgeons throughout the world, the significance of an accelerated sedimentation rate as a manifestation of a thrombogenic predisposition in the patient, this test becomes a matter of special importance. And why? What is the information which we get out of this test? Briefly, it is now known that in practically all cases of post-operative thrombosis and pulmonary embolism the sinking rate of the red cells is very much accelerated. We have also learned, when the sinking rate is increased to a marked degree, it signifies

that a number of very important changes have occurred in the chemistry and morphology of the blood. These are more or less proportional to the degree of injury which the organism has undergone in consequence of traumatism, infection, and certain diseases. In general terms, it means that the viscosity of the blood has increased, that the electric charge of the corpuscular elements of the blood has been lowered, and that their normal tendency to dispersion or repulsion has diminished, thus favoring the opposite tendency to aggregation, adhesion, and clumping, which, in itself, disposes toward thrombosis. Coincidentally with these changes, which are observed in all severe infections and traumatism, the alkalinity of the blood is diminished, the proteins or albumins of the blood decrease, and the globulin and fibrinogen content increases. The red cells tend to cohere in rows, or *roulaux*, the platelet count is increased, and with this they display a tendency to agglutination. As a rule, in all severe traumatisms in which there is much cellular destruction, the calcium content is also increased. In a word, the blood clotting factors are increased in actual thrombosis and the patient, who, before undergoing an operation, exhibits an accelerated sinking rate with all the blood changes that go with it, is a thrombophile, and thereby a potential thrombopath. It does not follow that, because this thrombophilic state has been induced by a severe operation or an infection, thrombopathy (an actual thrombosis) must necessarily occur. It simply means that the patient who shows a markedly accelerated sedimentation rate is more susceptible to thrombosis than one who has a slow, or normal, sinking rate. The value of the sedimentation rate test is not so much after thrombosis has occurred, but is a warning sign, a means of recognizing a thrombophile before he is subjected to the risk of an operation. After the operation, it is also important to watch the sedimentation rate as a means of estimating the thrombophilic effect of the operation, and the further liability of the patient to thrombosis. The test should, therefore, be adopted as a routine measure in all pre-operative surgical states, side by side with the leukocyte and other hematologic tests. The advantage of this test is its relative simplicity and visibility. Every practitioner can do it in his office, as Dr. Jacobs has so well done, without the aid of a microscope. Many methods of estimating the red cell sinking rate have been devised, but all are practically derived from the original method of Faehraeus, which grades the rate of sedimentation in millimeters per hour on a calibrated glass tube.

My plea is for a standardization of the technic,

and its general adoption as a pre-operative routine test in all surgical clinics and laboratories.

Dr. Walet: In our service at the hospital, we have made the sedimentation test a routine practice. We try not to operate on our pelvic cases unless the sedimentation time is around 100 or 120 minutes. If it is more rapid, we see that the cases are cooled off. We examined the patients after cooling process is over and have found that it works out well. There have been one or two instances which we could not explain in which the sedimentation rate was around three hours without acute symptom. Usually when the time runs along from 8 to 45 minutes, we leave the patients alone.

In cases of pelvic inflammation when everything else before us is negative, the sedimentation test is a good guide. In pregnancy it is a little more complicated.

Dr. Adolph Jacobs (closing): With regards to Dr. Walet's statement of the sedimentation time being slow in one instance, where there still was evidence of an active inflammatory process, I could only state, that the precautions referred to in my paper of carrying out the test were not properly regarded.

With reference to Dr. Matas' discussion, I would like to direct those interested to a most fascinating article of J. E. R. McDonagh (*Journal of Obs. and Gyn. of the British Empire* 1925). Through the spectroscope, he and co-workers have observed innumerable split protein particles travelling in the plasma, which in diseases undergo dehydration and lysis, thus gelating, and blocking blood vessels. He claims that by giving saline and glucose as hydrating agents and some colloidal metal as an oxidizing agent, these protein particles may be maintained in their proper size circulating at more or less equal distances.

ANGINA PECTORIS AND CORONARY THROMBOSIS.*

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Angina pectoris is a symptom complex characterized by pain in the chest which usually radiates to the left shoulder and arm and is accompanied by a sense of impending disaster.

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Angina is derived from a Greek word meaning to strangle and a strangling in the chest aptly describes the sensation produced by an attack.

Two types of angina are recognized and described—angina of effort and angina of decubitus.

Angina of effort is precipitated by some exertion or exercise, however slight. The patient may be entirely comfortable as long as he remains quiet, but begins to suffer pain on the least exertion. Angina of decubitus comes on with the patient lying quietly in bed, may be in a sound sleep; but as the symptoms and causes are practically the same, no distinction will be made in this discussion.

How the pain of angina is produced, what the underlying pathology is that is necessary for its production, is still a subject for argument among cardiologists, and the explanation offered by Sir James McKenzie seems to me to be most logical. He says that cardiac fatigue is the exciting cause, regardless of what the pathology present may be. Vaquez thinks aortitis is a necessary factor, while others think the coronaries must play a part.

The sense of constriction complained of, McKenzie believed, is produced by a contraction of the intercostal muscles, by the same sort of mechanism that a rigid right rectus is produced by an acute appendicitis—visceral reflex. While the pain usually radiates to the left shoulder and arm, it is not rare for the right arm to bear the brunt of the attack and sometimes the cervical region on one or both sides may be involved. The emotional make-up of the patient determines how much anxiety is manifested.

The diagnosis of angina pectoris is ordinarily comparatively easy and it is quite discouraging at times to hear of doctors getting by with a diagnosis of acute indigestion and overlooking as grave a condition as this and perhaps missing the opportunity of rendering some real help.

Practically all cases of death reported as acute indigestion have been due to angina pectoris or coronary occlusion. It is almost as grave a mistake to err on the other hand and call a simple intercostal neuralgia or neuritis angina, for some people are more nervous than others and develop phobias easily. A patient of mine who was suffering with a severe chest pain due to spinal arthritis was labelled angina a few years ago by one of the outstanding internists of the South.

The patient with angina is usually found sitting or lying immobile, with an anxious expression, and one hand over the chest, or else holding the hand or arm that is hurting.

The pain in the beginning is usually retro-sternal, but may be precordial, and, as said before, is found to radiate to one or the other hand, arm, shoulder, and may be the neck. The pulse may be perfectly normal or very irregular and too fast or too slow, depending on the pathology present. The blood pressure, too, depends on the underlying condition.

The diagnosis of angina should not be definitely made and proclaimed till one has had an opportunity of a thorough investigation of the circulatory system, though of course one can and should make a tentative or working diagnosis in order to be of some immediate help to the patient. The age of the patient will have some bearing on the diagnosis, the middle and later decades furnishing most of the patients, but angina occurs in much younger people than we used to think. My youngest patient was a man of 27 years.

The prognosis of course depends on what is found in the cardio-arterial system after a careful physical examination, and frequently is not as black as sometimes painted, though always serious.

The treatment of angina may be summed up in a few words. For the immediate attack, mental and physical rest, nitroglycerine or amyl nitrite, and if this does not

afford prompt relief, morphine in large and influential doses should be given. In the exceptional cases where morphine does not relieve, chloroform may become necessary. I kept one middle aged woman, who was suffering with angina, more or less anaesthetized with chloroform for nearly twelve hours before she obtained relief—status anginosus. At a convenient time after the attack is over the patient should have careful physical examination and be put on a regime that will prevent cardiac fatigue.

CORONARY THROMBOSIS

Coronary thrombosis, until recent years, was thought to be incompatible with life, but we know now that we may have many clinical problems due to thrombosis or occlusion of some part of the coronaries. Thrombosis is apt to occur in patients in middle or late life who already have some disease of the coronary arteries.

The immediate symptoms of coronary occlusion are pain, usually of an intense character, with symptoms of shock, an ashy grey facies, with a cold sweat, a small thready pulse and a sudden drop in blood pressure. The pain may be referred to the abdomen and raise the suspicion of some acute surgical condition in the abdomen. I have seen one such case in consultation. The pulse may be very rapid or very slow, depending on the location of the cardiac injury. A recent case of mine in a man 74 years old had a pulse rate of 30.

If the patient survives the initial blow, fever develops in a few hours and this is followed by a leukocytosis of low grade—11 to 15,000. During the first 24 to 72 hours there is apt to be for a time a pericardial friction rub. The secondary symptoms will depend on the size of the artery occluded and the amount of cardiac infarction. We have symptoms of all grades of cardiac failure. If the vessel occluded is small and the heart is otherwise sound there is a good chance for the patient to make a fairly satisfactory recovery. The

prognosis, however, is always serious and one should be very guarded in giving an opinion of the outcome until he has had time to study the situation.

The treatment should be absolute rest in bed for an indefinite period, depending on the severity of the attack, morphine in sufficient dosage to relieve the pain and quiet the patient and the administration of some coronary dilator. Of these, the theobromine or theocin preparations are probably best. Digitalis should probably not be used on account of the danger of rupturing the heart.

To sum up, then, each case of suspected angina pectoris should have the benefit of a careful examination before a positive diagnosis is announced, care being taken not to mistake some simple condition for angina, and vice versa.

There should be no difficulty in differentiating angina and coronary thrombosis after a few hours, and it is very important, for the thrombosis patient is apt to require a much longer rest in bed and more careful watching.

DISCUSSION

Dr. J. P. Culpepper, Jr. (Hattiesburg): The treatment of angina pectoris was first described by Hebreton, of the Royal College of Physicians, London, in 1768. The condition is old, we have had it for years, and we look for it as soon as we begin practice. It is a widespread condition, affecting men much more frequently than women. The age at onset is important because of the fact that usually it occurs in the late fifties, sometimes the forties, and rather rarely in the thirties.

A very interesting point that the writers bring out is the frequency of the disease in the intellectual classes—"those entangled in the toils of progress." In contradistinction to coronary occlusion, it comes to men more frequently than women and the intellectual classes are most often affected.

The actual cause of angina pectoris is unknown. There is a great deal of discussion as to the cause. Whether it is aortitis, coronary sclerosis, or whether it is from effort, we do not know. We know that at autopsy there is usually some coronary involvement, but in other patients where we find coronary sclerosis there has been no his-

tory of anginal attacks.

The position of the person is important in making a diagnosis. They remain in a state of immobility; they are inclined to stay in the position they are in when the attack comes on.

With reference to treatment, the old vasodilators of the nitrate family have been used for years and are still our standby. Of course we use morphine if the attack persists any length of time. Some maintain that if an attack lasts more than fifteen minutes, coronary occlusion should be suspected rather than angina because attacks of angina are usually very fleeting, and very often the attack is over before the doctor arrives. But the nitrites are standby, and I think patients with angina should be encouraged to have them close by.

I enjoyed the paper thoroughly and think it is a practical one for all of us because if it is true that angina is most frequently found in those under mental stress, a prolongation of the present depression will probably give us more cases of angina in the future than in the past.

Dr. Leonard Hart (Meridian): I do not know of anything more important to men doing internal medicine than the differential diagnosis of angina pectoris and coronary occlusion, or some other reason for pain in the cardiac region.

When a physician goes in to see a patient with pain in the cardiac region he must be on his guard that he does not make a false diagnosis. The patient, in the first place, is very anxious and very nervous. If he once gets it in his mind that he has a cardiac condition he is an invalid for the rest of his life. Whereas, if he has a cardiac condition and you do not give him the benefit of a doubt and diagnose his condition wrong, you probably will be responsible for a life.

Personally, I look upon coronary occlusion as of three classes. One in which there is slight involvement of the heart—just constriction and pain in the region of the heart, but the patient is incapacitated for a short time. In the second class, the patient has a heart condition after a severe illness for awhile, with the cardinal symptoms of coronary occlusion, but finally gets up and leads a fairly useful life. In the third class the patient has occlusion sufficient to cause definite pain and is incapacitated on account of the cardiac condition. I have made it rule, where a patient is able, to get him to an electrocardiograph as soon as possible and have a tracing made to see how much of the heart muscle is involved, because in that condition I think we can then give a man a better outlook for his future activities. We cannot pick up with the stethoscope the amount of muscle involvement; we have to have mechanical means to aid us in saying how much

damage has been done to the heart. We do not get anywhere by guessing.

There is another class of these cases which concerns me a little bit, and that is those patients who have a constriction in the chest followed by a dull pain, after exercise. When these men come to me to be examined I always make it a rule to test the dorsalis pedis action. In a diabetic condition the patient may have severe pains in the cardiac region and absence of pulsation of the dorsalis pedis artery in the dorsum of the foot, and there will be a serious outcome. But by getting the man under proper regime and proper diabetic treatment, you may get him in good shape. If you neglect him the process will go on and on. That is a small point I always use in examining heart cases, to see whether the dorsalis pedis artery is pulsating or not. If it is not, I always consider the case as serious. Occasionally when we get a man to the city we have a roentgen ray made of the blood vessels of the legs to see how far the arteriosclerosis has advanced and how far we are from a gangrenous condition. Very often you will find the first symptom of which these men complain is pain and slight constriction in the cardiac region. This warning often goes unheeded.

These people do not realize their danger. If you let them go on there will be definite occlusion and probably serious trouble.

As to treatment, in all cases of severe pain in the chest I supplement the morphine with the Parke-Davis tablet—scopolamin, morphine and dionin, and very seldom does it refuse to act.

Dr. P. W. Rowland (University): Dr. Bourdeaux's paper is very timely. Pneumonia can no longer be called the "Captain of the men of death." It is now heart disease, speaking generally; more specifically, coronary thrombosis. I am interested in you boys between forty and fifty; am just a little beyond the higher figure, so am not so much concerned about myself. You have to learn that the heart at forty can not do the work of the heart at thirty, nor the heart at fifty that of the heart at forty. You have got to check up on your mental and physical activities.

I want to speak particularly of one feature of coronary thrombosis that seems to me to have a bearing on the rapidity of its progress, and also upon its ultimate outcome. The coronary vessels, unlike the other systemic vessels, receive their blood supply at the moment of cardiac relaxation, by the systole of the aorta pushing the blood back upon the closed aortic valve. Now if these valves are damaged so as to permit of free regurgitation into the left ventricle, then the coronary arteries do not receive the proper supply of blood to sustain the heart; this is in

addition to the occlusion of the arteries, whether at their point of origin, or in any one or more of the branches. We then have anoxemia, progressive malnutrition of the heart muscle, which means cardiac failure. The angina is the result of the anoxemia, and, to my mind the severity of the attacks may, in some measure, at least be taken as an indication of the progress of the cardiac decompensation. Now if I have made myself clear, what shall we say as to the treatment? The treatment of the angina and of the thrombosis are, of course, two different things. For the relief of the anginal attacks, the nitrites and morphine certainly, but what of the underlying condition.

To my mind the underlying factor in all forms of cardiac failure is malnutrition of the cardiac muscle, and the only drug that offers any hope of success in the treatment is digitalis. Rest and digitalis.

My understanding of the action of this drug in cardiac decompensation, is this. Since the utilization of glycogen is absolutely essential to the rhythmic contraction of muscle, I assume that cardiac failure is due to the inability of the heart muscle to utilize glucose.

I think digitalis is stored in the heart muscle, and, owing to its high molecular concentration, slowly undergoes chemical reduction, forming compounds with the proteins of the muscle, and, as a result of this chemical reduction the tone and contractility of the heart muscle are increased, thus enabling the heart to consume more glucose, thus overcoming malnutrition, and bringing about what we are pleased to call recuperation of the heart muscle.

Dr. Allan Eutis (New Orleans): I only wish to emphasize certain points the doctor brought out, more especially the symptoms referable to the abdomen.

In coronary thrombosis we quite frequently find enlargement of the liver and leukocytosis. If the pain is referred to the epigastrium these patients are frequently operated on for gallbladder disease, especially if jaundice is present.

In my experience, every case of angina pectoris sooner or later becomes a case of coronary thrombosis, and I believe we make a mistake in using the term "pseudo" angina. I think true angina should be considered a serious proposition and the treatment should be preventive. Therefore any condition that tends to bring on an attack of angina should be guarded against. The case of mental excitement that Dr. Bourdeaux speaks of reminds me of an interesting case we had, in which exposure to cold would bring on an attack. The man getting up to go to the bathroom at night would have an attack of angina, and coming

out of a warm restaurant to the street, he would have an attack. If he had gastric distention it would bring on an attack. This man had had these frequent attacks for five years. He was on total compensation. We had quite a fight with the insurance company because they said he could not have angina so long and live. He finally died of coronary thrombosis.

Regarding the treatment of coronary thrombosis as well as angina, we have had remarkable results from the use of diathermy. I do not apply it myself, but refer the patients to one thoroughly familiar with the technic of diathermy. To cite one case: a woman was brought to Touro with coronary thrombosis and pulmonary infarct with pneumonia following this. Subsequently she had an embolism in the spleen and emboli in the kidneys. Diathermy applied over the heart relieved the pain and she was given treatments twice daily for about a week. She is living and in excellent health. We changed her mode of life, of course. I think we should change our idea that coronary thrombosis is necessarily fatal. One of the complications in this case was the forming of mural thrombi in the ventricle that became emboli. A patient may have an attack of coronary thrombosis and in two weeks have a paralytic attack from an embolus. These patients should be kept absolutely quiet in bed for two weeks, and possibly for two months.

One point regarding the diagnosis of angina pectoris. In a number of the anginas I have seen there is more or less myocardial insufficiency, and I rely a great deal on the cardio-respiratory test, advocated by Frost. In every case I have seen we found insufficient rise in blood pressure following the cardio-respiratory test.

Dr. T. D. Bourdeaux (closing): Just one word I want to say about digitalis. I do not want a wrong impression to go out. I believe just as much in digitalis for the decompensating heart as Dr. Rowland. The only exception is where they have an infarction, and with a weak point in the heart muscle it is doubtful whether it should be given. There is at least a theoretical danger of rupturing the weak point in the heart, and most of the cardiologists will caution you about the use of digitalis. Some recommend using it in guarded doses. I never knew what a "guarded" dose of digitalis was. I feel we want to give it for the effect. It has been my practice in acute cases to try to keep them quiet with morphine, and then later on if the heart shows too much fatigue I put them on digitalis. But in early cases, while the infarction is acute, I doubt the wisdom of giving digitalis in these cases.

THE INCREASING INCIDENCE OF
AMEBIC DYSENTERY AS A
WARNING FOR MORE
THOROUGH STUDY
OF DIARRHEAS.*

J. G. ARCHER, M. D.†

GREENVILLE, MISS.

For the last few years amebic dysentery has been on the increase. At one time it was said to be an endemic disease of the tropical and subtropical zones, but since the advent of easy and constant travel and the enormous shipping in industry of vegetables together with frequent fertilization of gardens with human excreta, amebic dysentery has spread even into the colder parts of the temperate zone. No section of this country is free from it and we in our clinic are seeing more and more cases as times goes on. The fact that it is becoming more wide spread and more prevalent is certainly a warning that all cases of diarrhea must be considered amebic dysentery until proven otherwise.

Chisholm¹ reported 24 cases occurring in the State of Colorado from 1926 to 1930 and explains the more frequent occurrence in temperate climates as follows—that observers in temperate climates have become more familiar with the disease and recognize it more easily, and that the improved methods of transportation which have taken place have been a causative factor in disseminating the disease.

In a survey of amebic dysentery in Chicago in 1929 by William and Geiger² they reported having examined 1148 persons all of whom were food handlers and found a surprisingly large proportion harboring pathogenic ameba. Twenty-seven carriers and two actively infected were found. They further state that there were 33 deaths from amebic dysentery in

Chicago between 1921 and 1927. The increase in amebic dysentery in Chicago they concluded from their survey was due to a number of factors: First, the greater stress being placed on medical zoology in the college curriculum; second, the improved clinical laboratory examinations; third, the increased migration from the Southern to the Northern States; and fourth, the report of their cases as a stimulus toward more thorough examination of diarrheal stools.

Lewis³ in a recent article stated that amebiasis or infection with *endameba histolytica* is more prevalent in the United States than was once thought, being rather common especially in the warmer climes of the country, and that it is universally accepted that from 8 to 10 per cent of the population as a whole is infected with ameba, but that the large majority of infected individuals complain of nothing to indicate the disease, yet these chronic or carrier patients do suffer some ill effects and are a menace to others.

In June, 1930, Leibly,⁴ in a most interesting article, wrote that in view of the increasing incidence of amebiasis throughout the United States as had been pointed out by Kofoid, Dowling, Smithies and others, it is desirable to realize the importance of this disease, no longer tropical and the occasional accidents met with in its treatment. The Gulf and Pacific Coast States still lead with the greatest number of infections but it is surprising to note the great number of carriers in Philadelphia as reported by De Revas and Fife, and in Chicago as reported by Smithies.

In reviewing the statistics of cases of amebic dysentery reported in the State of Mississippi for the last ten years, I find that 1,109 were reported from 1922 to 1925; from 1925 to 1928, 2,029 were reported; and from 1928 to 1932, 3,223 were reported.

In our series of some 44 cases extending over a period of ten years in the last four years we have had a decided increase. From 1922 to 1925 we saw only two cases, those

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†From the Division of Medicine, Gamble Bros. & Montgomery.

two being seen in 1922 and not any in 1923 or 1924. From 1925 to 1928 there was a slight increase in that we saw six cases. From 1928 to 1932, that is to say, for the last four years, we have seen 36 cases of amebic dysentery.

It is rather interesting to note that in this series there were 13 females and 31 males. The ages ranged from five to 64 years. Four cases occurring in children less than ten, and six in youths between the ages of ten and 20 years.

Manson-Bahr and Tait⁵ based a report on a rather exhaustive study of 150 cases occurring in nine years, making the statement that this is a disease of adult life, that they had never seen it in children, and that it was rarely ever contracted before the tenth year.

In 1927, Musser,⁶ in his survey of 51 cases, reported three cases under 21 years of age, two were 19 and one was 15, and states that the disease is extremely rare in patients under 18 years and over 60 years, and a clinical curiosity in a child. However, Jones and Turner⁷ in 1929 reported the disease in two two-year olds, a six-year old, and a three-year old.

We have found that this disease occurs in all walks of life, in school children, housewives, farmers, railroad employees, financiers, physicians, and common laborers. In other words, no matter what the social standing, no one is immune.

If we look further we find that this group covers quite a wide territory—in the Greenville district, extending as far south as Hollandale, some 30 miles; as far east as Itta Bena, 50 some odd miles, and as far north as Cleveland, about 45 miles; that two were Italians, two Mexicans, four negroes and two from out of the State, one from Louisiana and one from Arkansas.

All were discovered on the first stool examination except eight. Our method is to give magnesium sulphate and to examine three stools if necessary. The stools are always examined immediately after they

are passed. A protoscopic examination is always made and a swab taken from one of the ulcers. Brown⁸ says that the stools should be examined while warm and several stools examined. In fact, he advises a series of three examinations on successive days and states that this will discover 98 per cent of cases if ameba is present. He feels that the second most useful aid to diagnosis is the proctoscopic examination which reveals the punched out ulcers with normal mucosa between, and that swabs should be taken from the base of the ulcers.

In 16 of our cases the leukocyte count was 10,000 or over and only in four did we find a secondary anemia; one of these had malaria, one pellagra and one carcinoma of the colon. One might conclude from this report that the blood count has no diagnostic bearing upon amebic dysentery.

Another interesting point to note is that the temperature may range from normal to 102° or more.

The symptoms complained of by our patients extend over periods of from three to six years. In the acute stage the outstanding symptoms were of course frequent stools, some having only four or five stools daily, whereas others had as many as 30 or 40. One patient stated that his bowels moved almost every 15 or 20 minutes, so that he had no idea how many stools he was having. Together with this, pain and griping were usually complained of and two outstanding symptoms were a terrible griping in the rectum and straining at stool. A great many stated that as soon as they ate anything they had to go to stool immediately. Some had a great deal of tenesmus, there was considerable loss of weight in several, one patient having lost as much as 40 pounds in four or five months time.

The attitude of the patient is strange, for he always wants to establish the fact that he is sure his bowels are upset because he knows he has eaten something that has disagreed with him. One of these

patients said his trouble started after eating ham, one said he knew his was due to eating hot tamales, and one said his was due to eating vegetables. Little did they realize how right they were and why.

Brown⁸ says the organisms are disbursed by two main channels, food and water, that food may be infected by washing it with polluted water. He further states that food may be directly infected by direct contamination if those who handle foods harbor the parasite. The conclusions drawn by Stuart⁹ are that the human carrier so far as is known at present is the only practicable reservoir and dissemination is brought about by direct contact, contamination of vegetables eaten raw, distribution by certain athropod vectors as flies, cockroaches, and possibly by the use of infected water. The work of Wenyon and O'Connor shows that the cysts of the endameba *hystolytica* apparently do not withstand drying. In the presence of moisture, however, they continue viable for a long period, surviving at least a month in polluted water, the less concentration of sewage the longer the survival. These authors also found that chlorinated lime (1 part to 700,000) had no action on the cysts and that free chlorine in 1-10,000 concentration failed to kill in four hours. It is said, however, that a 1 to 200 cresol solution is the only safe chemical disinfecting agent.

The various conditions complicating our cases were acidosis in one, pulmonary tuberculosis in one, malaria in one, pellagra in two, carcinoma in one, syphilis in two and one patient was pregnant.

A well marked, well defined case of amebic dysentery is quite easily diagnosed by means of the microscope but this ease of diagnosis is not always met with in the chronic cases, so that frequent protoscopic examinations and frequent stool examinations are most necessary and most valuable. It is very easy to be misled by people, especially those who always make light of their condition and give a history of having

eaten something a few days previously with a resulting diarrhea and the discomfort and inconvenience that goes with it. If these patients develop later the so-called intermittent diarrhea which is rather typical of amebic dysentery and eventually become chronics they are indeed much harder to cure than if they are diagnosed and treated during the acute stage of the disease.

And let me emphasize my plea right here that all cases of diarrhea should be looked upon at least as possible amebic dysentery, until absolutely proven otherwise.

Kaplan, Williamson and Geiger¹⁰ state that careful examination of freshly obtained specimens of feces should be made in all diarrheas and in cases of colitis showing bloody mucus. Brown¹¹ goes so far as to suggest routine examination of stools.

SUMMARY

1. We are cognizant of the reports of different men scattered all over the United States showing a definite increase in amoebic dysentery.

2. A series of some 44 cases treated in our clinic has shown an increase of the disease in our section in the last four years. That in this series, though amebic dysentery is said to be a clinical curiosity in a child, four cases are reported in children less than 10 years, and six in youths between the ages of 10 and 20 years.

3. It is generally recognized that at least three stool examinations should be made and in addition a protoscopic examination.

4. In conclusion, let me repeat that the increasing incidence of amebic dysentery is a definite warning for a more thorough study of diarrheas.

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DISCUSSION

Dr. F. M. Acree (Greenville, Miss.): Dr. Archer's warning is, I think, very timely. He has shown you that ameba histolytica is on the increase. His work at the clinic in Greenville covers quite a large territory—a territory with a radius of fifty to seventy-five miles. The increase, as he has told you, is not only in our local region, and evidence of its widespread distribution is given by Reed, Anderson, David and Leake, writing in the *Journal of the American Medical Association* (January 16), in which article they say:

"Reports on the epidemiology generally agree that amebiasis is found almost all over the world, that its incidence is highest in tropical regions or where conditions of moisture, warmth and defective hygiene favor easy transfer, and that it is widely distributed over the United States."

Practically all of Mississippi, and certainly all of the Delta, offer these favoring conditions.

Dr. E. C. Faust, Professor of Parasitology at Tulane University, writing in the 19th Annual Report of the Medical Department of the United Fruit Company on "The Diagnosis of Entamoeba Histolytica," says:

"It needs to be emphasized, however, that in the Orient, in the southern United States, and in Panama, in which regions the writer has had considerable experience in making fecal examinations, there are large numbers of the population who are continually passing cysts, without showing any active dysentery."

As to the importance of amebiasis, and as a further incentive for you to heed the warning that Dr. Archer has brought to you, I quote Dr. William James of Panama, who has had many years of experience in a country where amebiasis is almost epidemic, and certainly endemic at all times. Writing on "Human Amebiasis due to

Infection with Entamoeba Histolytica" in the *Annals of Tropical Medicine and Parasitology* (August, 1928) he says:

"Like other protozoan infections, that of the entamoeba follows a protean course. It may be fatal in a short time; it may be severe for a longer or shorter time; it may become chronic, with alternating periods of dysentery and constipation, or with constant passage of unformed stools; it may be mild and cause but little discomfort; ulceration of the large bowel, quite extensive, may be present without giving rise to symptoms; and an infection with nucleated cysts as the end stage of the cycle may be in force without any indication of ulceration or of dysentery.

"The severity of the infection may be apparent in the physical condition of the patient, who is emaciated and greatly distressed by the frequency of the bowel movements. The localization of the ulcers may give rise to severe dysenteric symptoms without emaciation, and ulceration may be present in the upper part of the bowel without severe or even without appreciable clinical symptoms of dysentery, while the general health of the patient is steadily declining.

"At the present time I am firmly convinced that insofar as Central and Northern South America is concerned, entamoeba histolytica infection is responsible for a very large proportion of obscure gastrointestinal troubles which are not manifested by diarrhoea or dysentery as the cardinal symptoms.

"Any parasite that is said to infest from 5 to 20 per cent of the general population deserves interest, and we are here considering one that is responsible at times for a disease that is as protean in its symptomatology as syphilis itself, and considered by many reliable authorities as chronic and as difficult of eradication.

"Almost any gastrointestinal condition may be and is simulated, from simple indigestion to obstruction and cancer."

Dr. R. M. Donald (Moorhead): To my mind the most interesting thing that has been brought out, of all the interesting points in his paper, is the spread of this condition which we have heretofore called tropical dysentery. It is no longer "tropical" dysentery, and the fact that it is being spread all over the country is no doubt due to the continuous and extensive use of raw foods, and to the rapid transportation of people and property under modern conditions.

Dr. Archer mentions the possibility of contamination of food by the house-fly. I am sure that must play an important part in the transmission of the disease. A very interesting point in that connection is the fact that flies carry the infecting material in their bodies and distribute it for

many hours after having fed on this sort of material, and although these cysts when eliminated from the fly's body dry rapidly, and they do not show much resistance to dry heat, still I am sure that the house-fly is an important agent in the transmission of this disease.

You will note the increase of the incidence of this disease following the overflow of 1927, and it is worth while to wonder if possibly the overflow might not have had some part in that increase in his cases. I would like to know what Dr. Archer thinks about that. It seems a sound view, and especially when you notice the addresses of the people given in the other tables. Although many were not in the overflow territory, the majority of them seemed to be from the area of the Delta that was affected by the overflow.

I hardly think it is in good taste to mention this, because treatment is not being considered. but I am reminded of the fact that we have had a little experience with a remedy called anayodin, which contains a rather large percentage of iodine, in organic combination, and we have had some worthwhile results.

Dr. C. R. Stingily (Meridian): I have no doubt but what there is a growing interest in amebic dysentery all over the country. Dr. Donald brought out a point in which I am interested. I am also wondering what influence the incidence of the overflow had on the increase reported. Personally, I have not seen an increase. I am doing laboratory work and make quite a few examinations.

When we come to think about it, we are taught by the protozoologists that there are more than 5,000 different types of this organism. Many of us have them in our mouths, probably not pathogenic, and it is a wonder to me that we should not find cysts more often than we do, even though they are not pathogenic. Certainly, examination of stools for the diagnosis of amebic dysentery is not possible by any six weeks' trained technician. It is one of the most difficult examinations we have confronting us in the laboratory. I have found ameba in stools where I could not determine to my own satisfaction whether I was dealing with entameba histolytica, coli, or even gingivalis. The gingivalis inhabits the mouth and I think it is a source of error in the correct diagnosis. People err in statistics sometimes, and I think that accounts for Dr. Lewis' high incidence. I do not believe that 10 per cent of the people are infected with ameba histolytica, either cystic or the vegetable form. And when we come to think about the sources of error, and the fine technic required to make the diagnosis, it is no wonder that sometimes we are in error. If I am not mistaken, Dr. Lewis' work was based on his examination of soldiers during the recent war. We know that a good many protozoologists were made over night during the war, and they may

have been dealing with some other organism than the histolytica.

Dr. W. S. Leathers (Nashville, Tenn.): I am very much interested in Dr. Archer's paper and I wish to present some facts which have been obtained by investigation along this line in Tennessee. Doctor Meleney in my department at Vanderbilt Medical School has been working on amebiasis for the past three years and the points which I shall mention are based upon his work.

During the past three years in a study of intestinal protozoa and intestinal helminths as many as 31,000 fecal examinations have been made. Specimens have been collected from different parts of Tennessee, including a majority of the counties. The study in general shows that from 8 to 28 per cent of those examined were infected with endamoeba histolytica, the average being 17.5 per cent. Of course, this does not mean that these people have active amebic dysentery; they were in reality carriers. The cyst which is the carrier stage may, however, become active although this does not occur so frequently as one would expect. In this study active amebic dysentery was not found prevalent.

It may be of interest to note that 74 families, white people, with a population of 374 persons showed 38 per cent infection (cysts). This may be looked upon potentially as constituting a public health problem. According to age distribution the infection was found as follows: under 4 years, 20 per cent; 5-9 years, 23 per cent; 15 years of age and over, 40 per cent. The younger the person the lower the incidence according to these findings. One-fourth of this group gave a history of clinical dysentery sometime during the preceding ten years but it was not possible to correlate these symptoms with amebic dysentery. The workers were of the opinion that it was of the bacillary type. It is possible to confuse bacillary dysentery because of the presence of cysts with amebic dysentery.

In this connection a study was made to find out how the disease spreads and laboratory studies were conducted upon chickens, rats, dogs and flies. None of these seemed to be concerned with transmitting the disease with the exception of flies, a few flies showed cysts in the intestines. In some families the mother, because of the fact that she handles food for the group, may be the focus of spread.

It is possible that the amebic cysts maintain a symbiotic relation with bacteria and under certain conditions may become activated. Investigations are being carried on from this and other points of view.

Dr. Archer (closing): The increase of amebic dysentery has stimulated closer study of lesions outside the gastro-intestinal tract. There has been reported a case in which there was a large

ulcer of the abdominal wall following an appendectomy, which proved to be an amoebic infection. Another case of amoebic infection of the skin seen in a Chinese farmer and spoken of as amebasis cutis has been reported, and lastly the organism has been demonstrated in the testes of a man who had suffered with chronic diarrhea.

MEMORIAL SERVICES FOR 1931-1932 DECEASED MEMBERS*

C. A. WEISS, M. D.,

BATON ROUGE, LA.

Officers and members of the Louisiana State Medical Society:

What an honor and privilege it is for me to be permitted to stand here with bowed head and pay this humble tribute to the memory of our deceased members. May this wordy tribute to our departed members ring not with a pretension to eloquence but may it be permeated with a true feeling of sincerity.

Every funeral, every memorial, every tribute is for the living an offering in compensation of sorrow. When the light of life goes out there is a new radiance in eternity and somehow the glory of it relieves the darkness which is left behind.

Never a death but somewhere a new life, never a sacrifice but somewhere an atonement, never a service but somewhere and somehow an achievement.

Service, achievement, loyalty and devotion are attributes of true friendship and gauged by these virtues the physician is undeniably a true friend to mankind. Service under the most trying circumstances. Achievement, often when all hopes seem lost. Loyalty to prince and pauper alike. Devotion to the highest sense of duty, actuated by lofty ideals and principles.

Robert Louis Stevenson has said of the doctor: "He is the flower (such as it is) of our civilization; and when that stage of man is done with, and only remembered, to be marvelled at in history, he will be

thought to have shared as little as any in the defects of the period, and most notably exhibited in the virtues of the race. Generosity he has, such as is possible to those who practice an art, never to those who drive a trade; discretion, tested by a hundred secrets; tact, tried in a thousand embarrassments; and what are more important, Herculean cheerfulness and courage."

It gives us solace to know that our departed confreres possessed these virtues, and instilled them into their daily practice, practicing the gentle art of healing according to the loftiest and most ethical dictates, and leaving for us an excellent example to emulate.

Being but human and subject to the frailties of humanity they may have had their faults and weaknesses, but who of us can afford to criticize the shortcoming of our fellow-man without emphasizing our own failings. Given their same opportunities, could we have done the task as well?

They gave all that man can give, not under the tumultuous flare of trumpets nor urged on by stern command, but quietly, persistently, mercifully. They fought against the ravages of that relentless enemy of humanity—disease and suffering—constantly trying to soothe the pains, heal the wounds and prolong the lives of those entrusted to their care.

Today we have suspended our routine activities for a few short moments to commune with them, to do them honor in a final tribute to their memory—to their comradeship. To extoll to the world their virtues, their beneficence. To place a final wreath of appreciation and esteem, entwined with our kindest thoughts upon the monument to their memory. Therefore, let us resolve to spread the record of their good deeds during their all but too short a period of useful life upon the pages of our memories; that we paint their meritorious qualities in the most brilliant colors on the record of time; and consign to oblivion their infinitesimal shortcomings.

*Read before the House of Delegates, Louisiana State Medical Society, New Orleans, May 9, 1932.

*"For he was a scholar and a ripe and good one
Exceeding wise, fair spoken and persuading."*

DR. CLAUDE C. ALLUMS

The professional career of Dr. Claude C. Allums, 55 years of age, came to an abrupt ending at his home in Ringgold, La. Dr. Allums was born in Red River parish (Tipton's Mill) December 4, 1876, attended the public schools in that community and later was graduated from the University of Tennessee in 1899, passing the state medical board that same year. Later he took post-graduate courses at Tulane University and Mayo's Clinic. He suffered for some seven or eight years from thrombo angitis obliterans (Buerger's disease), and one of the most interesting papers ever read at a medical convention was read by him—concerning his own affliction—at the Fourth District Medical Society meeting in Shreveport, March 5, 1929, following which, he was elected president of the society. He was a member of the American, Southern, Tri-State, and Bienville Parish Medical Societies; the Masonic and Shrine Orders and the Baptist Church. He is the father of five children—three boys and two girls. In his untimely passing, his community and the medical fraternity have suffered a distinct loss.

DR. ARISTIDES AGRAMONTE

Dr. Aristides Agramonte, of New Orleans, Louisiana, was an honorary member of the Louisiana State Medical Society. For thirty years he was professor of bacteriology and experimental pathology at the University of Havana Faculty of Medicine and Pharmacy. He died in New Orleans, August 18, 1931, of heart disease and bronchitis, at the age of 63. Dr. Agramonte was born in Cuba in 1868. His family emigrated to New York, where he attended the public schools and graduated from New York University in 1886, and from the College of Physicians and Surgeons of Columbia University in 1892. He

entered the medical corps of the U. S. Army in 1898, and, in 1900, along with Walter Reed, James Carroll, and Jesse Lazear was appointed a member of the U. S. Army board which was sent to Cuba to conduct a clinical and experimental investigation of the cause of yellow fever, which board eventually proved for the first time that yellow fever was transmitted to man by the bite of the mosquito *Stegomyia fasciata*. Dr. Agramonte's chief part in this investigation was to perform the necropsies and the gross pathologic work, and for this the United States Congress, in 1929, granted him a Congressional Medal and a pension. Following the work of the commission and on the establishment of the Republic of Cuba, he remained in Havana, where he was a member of the Yellow Fever Board of Havana, for many years a member of the National Board of Health, and, from 1902 to 1909, Secretary and later Chairman of the Board of Infectious Diseases of Havana. He was president of the Cuban National Medical Congress in 1917, and of the Havana Clinical Society, 1915-1917, and a member of other scientific societies. At a recent meeting of the Pan-American Medical Association he was appointed chairman of the Fourth Congress which will meet in New Orleans in 1932. He was the author of many scientific papers on tropical disease. Recently Dr. Agramonte was called to New Orleans to organize a department of tropical diseases in the New Medical School of Louisiana State University.

DR. JASPER J. BLAND

Dr. Jasper J. Bland of Vinton, Louisiana, was born in 1851 and died in Beaumont, Texas, on March 31, 1932. He was graduated from the School of Medicine, Tulane University, in 1882. Dr. Bland was a native of Pelahatchie, Mississippi, and was educated at the University of the South, Sewanee, Tennessee. He was a member of the Calcasieu Parish Medical Society until his retirement in 1930.

DR. J. N. BLUME

Dr. J. N. Blume of Arcadia, Louisiana, was born in 1874, and was graduated from the Memphis Hospital Medical College in 1903. He was a member of the Louisiana State Medical Society, and American Medical Association. Dr. Blume was Secretary-Treasurer of Bienville Parish Medical Society at the time of his death, April 25, 1932. He was fatally injured when his coupe was struck by a freight train. Dr. Blume was candidate for Bienville parish coroner in the recent primary and was defeated by a few votes. He took an active part in promoting vaccination for smallpox and diphtheria and instigated work in public schools of the parish. He is survived by his wife, a daughter, and a stepdaughter.

DR. PHARES ALLAN BOYKIN

Dr. Phares Allan Boykin was born in Richland Parish in 1873 and died April 3, 1932. He was graduated from the University of Alabama School of Medicine in 1898, and in 1902 he located in Jeanerette where he soon built up a large practice. Dr. Boykin was married in 1904 to Miss Charlotte Duvall of Baton Rouge. He was prominent in Masonic circles, and was a veteran of the Spanish-American war, being a member of Anthony Muller Camp No. 8, of New Iberia. He was also a Fellow of the American Medical Association.

DR. J. ERNEST BROWN

Dr. J. Ernest Brown, of Lake Providence, was born in 1878. He was graduated from the Atlanta College of Physicians and Surgeons in 1901. He was a member of the Louisiana State Medical Society and the American Medical Association. He died on May 7, 1932. Dr. Brown is survived by his widow, one son, one daughter, three sisters, and five brothers.

DR. ROBERT DOUGLAS

Dr. Robert Douglas, of Shreveport, La., was born in 1885, and was graduated from Tulane University Medical School in 1919.

Almost since the time of his graduation he was connected with the Highland Clinic, where he devoted himself solely to internal medicine. Dr. Douglas was a past president of the Shreveport Medical Society. He was also chairman of the Caddo Parish Citizens' Health Committee, directing and handling the anti-malaria campaign. Dr. Douglas died on July 23, 1931. He was a member of the Shreveport Medical Society and the American Medical Association.

DR. ALBERT LIVINGSTON EAST

Dr. Albert Livingston East, prominent physician and planter of East Baton Rouge, died April 23, 1932, at his plantation home near Zachary after an illness of several months. Dr. East was 56 years old and was born and reared in the parish, having lived at the plantation home his entire life. He was the son of Augustus L. East and Arabella Long East. Dr. East was graduated from Tulane University in 1899. He was a leader in community affairs and commanded the admiration and respect of all who knew him. Surviving him are his widow, who was formerly Miss Annie Young; two daughters; three sons; one brother, Dr. S. T. East of Norwood; and one sister, Mrs. John W. Piker.

DR. JAMES BIRNEY GUTHRIE

Dr. James Birney Guthrie, of New Orleans, La., was born in 1876, and was the son of the late James B. Guthrie and Clara Merrick. He was graduated from Tulane University, School of Medicine, in 1900. Dr. Guthrie was instructor in medicine from 1900-1906, assistant professor of medicine from 1906-1912, and professor of clinical medicine from 1912-1930, at his alma mater. At the time of his death he was professor of the principles and practice of medicine at the Louisiana State University Medical Center. Dr. Guthrie was a Fellow of the American College of Physicians; served during the World War; was a senior visiting physician to Hotel Dieu and the State Charity Hospital; and consultant in medicine at Touro Infirmary. He

died in New Orleans on March 8, 1932, of heart disease. He was a member of the Orleans Parish Medical Society and the American Medical Association.

DR. ROBERT GARNETT HAWKINS

Dr. Robert Garnett Hawkins, of Palmetto, La., was born on October 24, 1862, and died on June 17 1931. He attended Louisiana State University and Soule Business College. In April, 1890, he was graduated from the Department of Medicine, Tulane University, and immediately began the practice of his profession in Northeastern St. Landry Parish, where he resided up to the time of his death. Dr. Hawkins was highly esteemed by his numerous patients and friends, and was a humanitarian in every sense of the word. He was a member of the Masonic Lodge of Melville, La., and also a member of Palmetto Camp, Woodmen of the World.

DR. SARA E. HUCKABAY

Dr. Sara E. Huckabay, of Pleasant Hill, La., was born in 1884. He was graduated from Tulane University in 1923 and was a member of the Shreveport Medical Society.

DR. WYNBURN BENJAMIN LAWTON

Dr. Wynburn Benjamin Lawton, of Mira, La., was born in 1868. He was graduated from the Memphis Hospital Medical College in 1894. He was a member of the Shreveport Medical Society and the American Medical Association.

DR. BENJAMIN A. LEDBETTER

Dr. Benjamin A. Ledbetter, of New Orleans, La., was born in 1868. He was graduated from the Medical Department of Tulane University in 1892. He was President of the Louisiana State Medical Society in 1912, and was Chairman of the Committee on Public Policy and Legislation for several years. Dr. Ledbetter was a member of the Orleans Parish Medical Society, of the American Medical Association, and formerly a member of the State Board of Health. He died on May 15, 1931.

DR. FRANCIS BERKELEY LUCKETT

Dr. Francis Berkeley Luckett, of Alexandria, La., was born on Sunny Isle Plantation in Rapides Parish on December 19, 1879. He received his medical education at Tulane School of Medicine, from which institution he was graduated in 1910. He was later connected with the United Fruit Company and practiced in Honduras for five years. In 1912 he was married to Miss Jessie Liskow. Dr. Luckett moved to Alexandria several years ago and practiced there until his death on January 1, 1932. He was affiliated with both the Rapides Parish and Eighth District Medical Societies, and a regular attendant upon their meetings.

DR. ROBERT CLYDE LYNCH

Dr. Robert Clyde Lynch, son of Dr. William and Minerva Maitlen Lynch, was born in Carson City, Nev., September 8, 1880. When he was three years of age his family moved to New Orleans and he received his early education in the public schools there, and was graduated from Tulane University Medical School in 1903. After practicing general medicine for two years in Natchitoches, he studied the specialties of Ophthalmology and Otolaryngology, first in New Orleans, until August, 1906, and then in London, Paris, Vienna and Freiburg, until 1907. Early in his career Dr. Lynch was associated with the late Dr. A. W. DeRoaldes and on the death of the latter was named Surgeon in Charge and in 1930, Surgeon in Chief of the New Orleans Eye, Ear, Nose and Throat Hospital. He was Professor of Otolaryngology in the Post-Graduate School of Medicine of Tulane University and Consultant in Otolaryngology in the Touro Infirmary. For several years he had served as a member of the Editorial Board of the Archives of Otolaryngology and as a collaborator on several other medical journals. He was a member of the New Orleans Medical Association, the American Medical Association, the American College of Surgeons, and the American Academy of Ophthalmol-

ogy and Otolaryngology; President (1924) of the American Bronchoscopic Society and a Fellow of the American Laryngological, Rhinological and Otological Society. He is survived by his widow, Amanda Genin Lynch, and by two sons, Mercer Genin Lynch and Robert Clyde Lynch, Jr. Outstanding among his professional accomplishments as a laryngologist especial mention must be made of his brilliant surgery, wide and varied experience and unusually successful results in malignant neoplasms of the larynx. Many of these operations were done under suspension of laryngoscopy with instruments and apparatus which he had revised and perfected. As a clinician and special surgeon and as a lucid and forceful teacher in laryngology, he achieved national recognition and distinction. He was equally distinguished for his kindness of nature, his charitable service and for his thoughtfulness toward his friends. He was only 52 years of age, and was in the most useful period of his splendid professional career and had the respect and love of his colleagues wherever he went.

DR. SAMUEL M. LYONS

Dr. Samuel M. Lyons, of Sulphur, La., was born in 1869 and died on June 19, 1931. He was graduated from the Medical Department of Tulane University in 1884. He was a member of the Louisiana House of Representatives from Calcasieu Parish, and for many years was prominent in public life of his parish, having served as a member of the police jury, as tax assessor and coroner. He leaves four sons and one daughter; Dr. Shirley C. Lyons and Dr. Kyle M. Lyons of New Orleans, Dr. Samuel B. Lyons of Beaumont, Lucien Lyons of Sulphur and Mrs. Packet Clark of Baton Rouge. He was a member of the Calcasieu Parish Medical Society.

DR. TILDEN H. MADDEN

Dr. Tilden H. Madden was born near Newton, Scott County, Mississippi, August 3, 1874, the son of E. J. Madden and Ma-

thilda Finley. He was graduated from high school at Newton, Mississippi. He attended Louisville Medical College and Memphis Hospital & Medical College, and was graduated from the latter institution in 1901. Dr. Madden located at Jonesboro, Louisiana, where he practiced until 1906. He then moved to Antioch, Louisiana, where he practiced for four years. From there he went to Aycock, Louisiana, where he continued to practice until the time of his death which occurred on September 3, 1931. He was a member of the Claiborne Parish Medical Society.

DR. WILLIAM H. MORGAN

Dr. William H. Morgan, of Keatchie, Louisiana, was born in 1872. He was graduated in 1895 from the University of Virginia Department of Medicine at Charlottesville. On February 27, 1932, at the age of 60, he died in a sanatorium at Shreveport of carcinoma of the right lung with metastasis to the brain.

DR. HENRY T. NICOLLE

Dr. Henry T. Nicolle, of Baton Rouge, La., was born July 14, 1882, near Convent, Louisiana. He was graduated in 1906 from the Tulane Medical School and interned at Charity Hospital. He was married to Miss Sophie Fontana in 1909. Dr. Nicolle served several years in the army, both as Lieutenant with the American Expeditionary Forces on the Mexican Border and as Major with the Army of Occupation in the World War. He was director of the Laboratory and Physiotherapy Department at Our Lady of the Lake Sanitarium, Baton Rouge, La., for the past six years. Dr. Nicolle was best known locally for his activity in pathological research, and for the inaugurating of intensely interesting and instructive monthly clinico-pathological meetings at Our Lady of the Lake Sanitarium. In commemoration of his memory these meetings were called the Dr. Nicolle Clinico-Pathological Meetings. He was a member of the East Baton Rouge Parish Medical Society, the Sixth District

Medical Society, and the American Medical Association. He died on August 3, 1931, from cerebral hemorrhage, and is survived by his wife and six children.

DR. JAMES FRANCIS O'LEARY

Dr. James Francis O'Leary, of Shreveport, was born in 1847. He was graduated from the Bellevue Hospital Medical College of New York in 1873. He was a member of the Shreveport Medical Society and the Louisiana State Medical Society, and also a Confederate veteran. He died on April 19, 1932.

DR. J. ALBERT PRICE

Dr. J. Albert Price, of Plaquemine, La., was born in Lafourche Parish, July 28, 1874, and died March 15, 1932, of apoplexy. Dr. Price received his early education in the public schools of Terrebonne Parish. After his father's death he studied telegraphy and worked in that capacity for the Southern Pacific Railroad some four years. From 1895 to 1899 he was a cadet at Louisiana State University, winning the medal for the highest average for his first year, and was ranking officer of his class for the subsequent three years. After completing his junior year there, he matriculated at Tulane Medical College in 1899. He was a successful competitor for the position of extension student in 1900 and served one year. He was also later an attachee of the Charity Hospital, and a former member of the Kappa Sigma Fraternity. Dr. Price returned to Lafourche Parish where he practiced medicine in Lockport successfully for a number of years, later moving with his family to Plaquemine, where he was appointed the first director of the Iberville Parish Health Unit. He was a member of the Knights of Columbus, Louisiana State Medical Society and Iberville Parish Medical Society.

DR. GEORGE A. PENNINGTON

Dr. George A. Pennington, of Madisonville, La., was born in 1873 and died on March 8, 1932. He was graduated from Tulane University School of Medicine in

1900, and was a member of the St. Tammany Parish Medical Society.

DR. ROLLAND ARTHUR STEWART

Dr. Rolland Arthur Stewart, of Frierson, La., was born in Livingston County, Missouri, December 24, 1873. His parents were Judge Charles Stewart and Sarah Fell Stewart. He was a graduate of the Chillicothe, Missouri, High School and Chillicothe Business College. On February 17, 1897, he was married to Alma Ravis of Brookfield, Mo. In 1903 he entered the University Medical College of Kansas City, Mo., from which he was graduated in 1907. Following his graduation, he located in Frierson, La., where he was very successful in the practice of medicine until his death which occurred October 20, 1931. Dr. Stewart was a man of exalted character and real worth.

DR. LOUIS GREY STIRLING

Dr. Louis Grey Stirling, of Baton Rouge, La., was born February 8, 1862, in West Feliciana. He was graduated from the Tulane Medical School in 1894, and interned at Touro Infirmary 1893-4. In April of the year 1894 he started practice in Baton Rouge, and on December 9, two years later he was married to Miss Alma Mansur. Dr. Stirling was ex-president of the East Baton Rouge Parish Medical Society, and ex-vice president of the Louisiana State Medical Society. He was a member of the City Council, 1902-6, and had been a member of the physicians of the state prison since 1900. He was Past Master of St. James Lodge F. and H. M., was a member of the East Baton Rouge Parish Medical Society, and at the time of his death, which occurred December 19, 1931, was permanent Chief of Staff of Our Lady of the Lake Sanitarium.

DR. WILLIAM VANNAH TAYLOR

Dr. William Vannah Taylor, of Olla, La., was born in Holly Springs, Mississippi, on May 22 1850, son of Dr. William Vannah Taylor 2nd and Mary Cornelia Jarratt. He received his early education in the schools

of Memphis, Tenn., and St. Louis, Mo., and was graduated in medicine from the Memphis School of Medicine in 1872. He was married to Miss Sarah Frances Davis in 1873. Dr. Taylor was a "gentleman of the old school," much loved by the people of Catahoula, LaSalle and Caldwell parishes where he practiced during the greater part of his lifetime. He died on October 21, 1931, at the age of 81, and is survived by five children. Dr. Taylor was a Knight Pythias, and a loyal member of parish medical societies, being the original founder of the LaSalle Parish Medical Association of which he was secretary until his death.

DR. BAXTER L. THOMPSON

Dr. Baxter L. Thompson, of Jena, La., was born in 1863, and died on May 1, 1931, of heart disease. He was graduated from the Medical Department of Tulane University in 1884, and was a member of the LaSalle Parish Medical Society.

DR. ZACHARY TAYLOR YOUNG

Dr. Zachary Taylor Young, of New Orleans, was born November 22, 1884, at

Ville Platte, Louisiana, and died in New Orleans on May 9, 1932. In 1911 he was graduated from the Medical College of Tulane University, and became a general practitioner at Opelousas. Twelve years ago he came to New Orleans for a post-graduate course in eye, ear, nose and throat work and has specialized in this branch of medicine here since then. His parents were Z. T. Young and Valentine Archenard Young. He is survived by his widow and six children.

To their families we extend our heartfelt sympathy; they have lost a precious loved one, we have lost a real friend and highly esteemed colleague.

They walk no more in our midst as tangible physical beings. We miss their familiar faces, and harken no more to their wise words of counsel and medical discussions at our assemblies. But they are still with us in spirit, and long will our hearts respond to our memory's stimulation of their former presence with a silent but fervent prayer for their everlasting peacefulness.

ONE-HALF OF U. S. PHYSICIANS AT PEAK OF PROSPERITY HAD INCOMES OF LESS THAN \$3,800, SURVEY REVEALS.*—In the boom year, 1929, one-half the physicians of the United States received a net income of only \$3,800 or less, while more than 21,000 practitioners—15 per cent of all the physicians in the United States—derived less than \$1,500 from their professional activities, and more than 4 per cent lost money as a result of their year's work, according to figures based on an exhaustive study of the incomes of physicians in the United States contained in a report made public November 24.

The report states that although a number of physicians have exceptionally large incomes, it was found that a larger proportion of physicians have inadequate incomes than have members of any other professional group.

Physicians' incomes declined 17 per cent in 1930, the first year of the depression, according to the report. Comparative figures for the first three months of 1931 disclosed a still larger drop in income, and the author states it cannot be doubted that as the year progressed physicians' incomes continued to recede.

The report, "The Incomes of Physicians," by Maurice Leven, Ph. D., to be published by the

University of Chicago Press, is the 24th study made by the Committee on the Costs of Medical Care in Washington, a non-governmental organization, which on November 29th at a meeting in New York City will issue its Final Report with recommendations based on its exhaustive five-year investigation of the problem of providing "adequate, scientific medical care to all the people, rich and poor, at a cost which can be reasonably met by them."

The Committee's Final Report, to be made public before the National Conference on the Costs of Medical Care at the New York Academy of Medicine on that day, is being anticipated with the greatest expectancy by both medical practitioners and the general public.

Incomes of Physicians in Cotton Belt Dropped 50 Per Cent During First Year of the Depression. General practitioners felt the effects of the first year of the depression more severely than specialists, according to the report, which cited estimates that their net incomes were reduced by 20 per cent, while those of specialists dropped only 13 per cent.

*Committee on the Costs of Medical Care.

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THE VENEREAL DISEASES

The briefly summarized observations of
a physician who has devoted much time
to the problems of the venereal diseases
both in America and Europe, as noted in a
recently completed tour of Germany,
Czechoslovakia, Great Britain and Bel-
gium might be of more than passing in-
terest. In these countries the drugs most
frequently employed for the treatment of
syphilis are nearsphenamine and bismuth,

very occasionally only is mercury or old
salvarsan employed. The treatment on the
whole does not carry with it the careful
general medical examination which is em-
ployed in the best types of clinics of this
country. Cisternal puncture is only rarely
performed, lumbar puncture being the
method of choice to secure spinal fluid in
order to gauge treatment. A new form of
lumbar puncture needle is on the market
in Germany consisting of a very fine
double cannula needle. Both are advanced
almost into the meninges and the inner
and finer of the two is entered into the
subarachnoid space.

In Germany and Great Britain the lead-
ing clinicians believe that syphilis is on the
decrease as result of the freedom, acces-
sibility and thoroughness of treatment.
Prophylactic accessibility is exemplified
in Berlin by the thousand or more treat-
ments given monthly in the official First
Aid stations. In this country also pro-
phylactic packets containing calomel oint-
ment and argyrol are on sale in slot
machines and are said to be sold in large
numbers. In Germany marriage advice
bureaus are established but most medical
men deem them superficial and unscien-
tific. The problem of criminal abortion in
Germany has reached enormous propor-
tions. Many physicians are advocating the
performance of abortion on "social indica-
tions," but the possibilities of such a pro-
cedure are regarded with fear and appre-
hension by thoughtful physicians. The
treatment of venereal diseases in two Con-
tinental countries, Germany and Czecho-
slavokia, is a part of the general health in-
surance scheme. Treatment is carried out
in many centers entirely by private
physicians who are paid by the Health De-
partment so much for each case treated.
In some cities the treatment is centralized
in clinics. In Great Britain the treatment
of venereal diseases is a special service not
included in the insurance scheme. In Bel-
gium dispensaries are provided for the
free treatment of syphilis but the private

physician may also receive compensation from the Government for the care of these cases.

The most important observation concerning the problems of gonorrhea is the very general desire on the part of European research workers, clinicians and health authorities to have some central agency which can collect information about the work on gonococcal infection that is being done in different countries. In this way it would obviate loss of money, time and effort which are wasted in projects which have already been gone over elsewhere. Apparently discouragement over the problems of gonorrhea, cheerfulness about the control of syphilis are the dominant themes in the minds of physicians in the countries visited by the reporter quoted briefly in the above paragraphs.

GASTRIC ULCER AND DIET

The increasing knowledge of the importance of the diet in the production of gastro-intestinal syndromes is well exemplified by a recent article, which demonstrated the common occurrence of gastric ulcer in experimental animals which were fed diets deficient in vitamin B (B_1). The diet of the average individual has long been held responsible for the production of many types of gastric, and to a lesser extent, intestinal disturbances. It has long been appreciated that certain foods, improperly prepared dishes, and over-eating are capable of producing hyperacidity, diarrhea, or what not. The symptoms of these conditions have been attributed entirely to disturbance of function produced by the gross dietary errors. It has remained for the experimentalist to note that diets, which are deficient in these nebulous and for the most part invisible substances known as vitamins, are capable of producing actual pathologic changes in the alimentary tract. Thus an absence of vitamin A in the diet will produce epithelial disturbances, which are held accountable for the gastro-intestinal symptoms associated with this type of

vitamin deficiency. The ration which is deficient in vitamin B (B_1) is capable of producing gastric ulcer as has been shown recently by Dalldorf and Kellogg, who studied a series of 64 animals whose diets lacked vitamin B complex and vitamin C. In these very carefully controlled experiments the animals to the number of 73 per cent which were fed this ration were found to have ulcerations of the gastric mucosa, whereas the controlled group was found to be free from gastric lesions. Seventy-four such ulcers were noted, and eight of these were of the chronic indurated type, which resembled the chronic peptic ulcer of man. The acute lesions were minute, punched out, necrotic areas in the gastric mucosa, and they could only be observed with the microscope. The size of the lesion would be comparable to that of man if difference of the size of organs is considered.

This contribution is interesting because it adds to the known pathology of vitamin deficiencies, and is also of considerable interest because of the implication that peptic ulcer may depend upon lack of certain elements in the food. The deficiency in the diet may not depend upon an actual lack of the vitamin substance in the diet, but to the minimal amount rather than the optimal quantity in the ordinary food rations of an individual who may have a constitutional susceptibility to gastric ulcer.

MEDICAL ECONOMICS

The growing interest and the ever increasing attention that the medical man is paying to the problems of the practice of medicine is undoubtedly, in part, one of the bi-products of the present depression. That such is the case is to be expected, but it must be realized also that these problems, which are coming into focus at the present time, existed a long time prior to the present depressed state of the country. Difficulties in practice, and new schemes to do away with such troubles, were discussed even in the flush times of three years ago.

Exemplifying the interest that the present day profession is taking in these questions is the current special section devoted to medical economics in the Journal this month. The first two presentations show what the problem is in New Orleans and how the medical profession of the City is attempting to obtain a square deal in the practice of medicine. These sections properly belong under the Orleans Parish Transactions, but because of their extreme importance it was feared that the readers not interested in the doings of the Orleans Parish Medical Society might miss them, and they are, therefore, included in the special section. The third part of the section has to do with a plan that has been proposed in Georgia to counteract one of the phases of difficulty in practice that requires no comment. The fourth section is

concerned with the report of the Committee on the Costs of Medical Care, a study which was started some years ago and which, with a large expense and great deal of effort, has collected a tremendous amount of fact finding information, with the interpretation of which we believe the average medical man will disagree. Even if the medical practitioner who will have the opportunity of scrutinizing this report is not in accord with the findings, he must not forget that the members of the Committee are extremely high minded individuals who have sincerely attempted to lessen the burden on both the practitioner and his patient. One of the interesting features of this report, the work upon which was begun in 1926, with Dr. Ray Lyman Wilbur as Chairman, is the implication of the Committee members that state medicine is not practicable.

MEDICAL ECONOMICS

REPORT OF THE MEDICAL FORUM

The Medical Forum presents herewith the report made to it on October 27, 1932, by a Committee consisting of Doctors Emmett Irwin, Chairman; Emile Bloch, A. Mattes, E. L. Leckert, Maurice Couret, J. G. Harz, Val H. Fuchs, and M. B. Boebinger. The report follows:

On October 21, 1932, this committee went into the question of abuse quite thoroughly and after considerable discussion have outlined abuses to be classified as follows:

I. Abuse by Profession (Hospitals, Professions and Individuals).

II. Hospital Abuse.

A. Federal (Hospital).

1. Sweet Bill (Its harm to organized medicine).
2. Marine Hospitals.
3. Regional (Veterans) Hospitals.
4. Federal Compensation.

B. State Hospitals.

1. Individual abuse.
2. Emergency abuse.
3. Compensation abuse.
4. Political abuse.
5. Private nursing (Charitable cases).

C. Private Hospitals.

1. Improper facilities for receiving patients.

2. Abuse to patients.

3. Hospital fees.

D. Clinic abuse.

III. Welfare abuse.

A. Child Welfare.

B. Industrial Insurance.

C. Parish Health Units (Local, State, National).

IV. Medical Schools.

V. Clinics without proper Social Service Departments.

VI. Compensation and Insurance Companies (Stipulated Low Fee Schedules).

VII. School Boards and Their Welfare Organizations.

VIII. Boards of Health (State and City).

IX. Advertising within the Law.

The next and greatest and most difficult of all was considered the question of the best and proper means of remedying these abuses.

II. Hospital Abuse.

This may be said to be due to laxity on the part of the profession itself, upon the great publicity given the public regarding the supposed high cost of medical and hospital care. It is practiced by both private, state, and national institutions and is due in particular to the lack of desire on the part of these institutions to properly investigate the social status of patients admitted to these institutions, and which can largely be corrected

if the individual physicians connected with these hospitals will be alert in reporting the individual cases to the authorities.

A. Federal Hospitals.

1. A digest of the Sweet bill should be obtained and the Orleans Parish Medical Society in conjunction with the State Medical Society should voice their disapproval of this act and report this action to the committee at Washington, D. C. The forty-eight state medical societies should be circularized and the American Medical, Southern Medical Associations, the American College of Physicians and the American College of Surgeons should be requested to urge reconsideration of this bill with regard to the grave injustice done to private institutions and to the medical profession, locally and nationally, insofar as it refers to the granting of free care and attention to ex-service men for conditions which they did not receive in the line of duty.

2. Marine Hospitals. Contact with medical societies and Hospital Councils in all cities where Marine Hospitals may be located requesting them to join us in petitioning the Public Health Service for relief from the unfair competition with the profession and private institutions, in localities where efficient service is rendered by the local profession and private institutions. These institutions are being imposed upon by the Veterans' Bureau by unloading upon them veterans for hospitalization and other treatment, thus depriving private hospitals and physicians of cases which should justly be theirs.

3. Regional (Veterans) Hospitals.

These institutions are accepting patients, it is understood, who justly are not deserving of care by the Government. This refers in particular to the hospitalization of veterans for conditions not received in the line of duty. Relief should be sought through proper legislation, and appeal to the various national and state medical societies, as well as contact with the Veterans' Bureau, through Major Frank T. Hines, who is head of the Veterans' Administration. (Dr. Charles M. Griffith is at the head of the Medical Department.)

B. State Hospitals.

1. It is believed that State Hospitals must be conducted for the purpose for which they were established and are maintained, i. e., the care of the indigent poor, and sick. It is believed those who can afford to pay for medical and hospital service should be refused admittance to these institutions by the administrators of such institutions because it is a known fact that to educate persons to accept charity creates a desire on their part to always lean upon charity and this tends to pauperize the community and place an unfair burden upon the public in the way of unnecessary taxation to care for those who do not deserve it. These institutions must be required to have a pro-

ficient social service enabling them to properly investigate and classify patients applying for admission and this service should be under medical supervision. In this connection, it might be stated some members of the legal profession encourage accident patients to remain in the state institutions in order that a saving may be made by the individual regarding the preparation of records and in this way aid the attorney to himself obtain larger fees, and at the same time obtain the physician's services in legal action without the payment of a fee to the physicians.

2. Emergency Abuse. It must be remembered that no person should be refused emergency treatment regardless of his social or financial status, but all such cases should be immediately investigated and once the emergency is over all individuals capable of paying for service rendered should be removed to private institutions and placed under the care of their respective physicians.

3. Compensation (and Insurance) Abuse. It must be brought to the attention of the public that our charity hospitals are caring for individuals who are insured and carry policies protecting them in case of emergency, and for this service the public is paying through its taxes, which money is used in the treatment of these cases for which the taxpayer gets no return. It is believed that the medical societies should endorse legislation requiring all automobile owners to carry appropriate insurance or that every automobile should be bonded to care for accidents incurred by the automobile, as a great part of emergency work is caused through the automobile. It must be understood we are not concerned with the question of liability as to who is responsible for the injury, but what we are concerned with is that the state funds are used to care for this type of case and such funds are derived from the taxpayers, and the public should know that a portion of their taxes are being used in the care of persons not deserving of charity. The state institutions are supposed to be used in the care of the poor and sick residents of the state but in many cases the law with regard to residence is not enforced and transients therefore may receive complete service for accidents. The profession as well as the private institutions are entitled to compensation for the care of persons who are able to pay and they would receive compensation if these cases were properly directed to private institutions.

Serious objection was raised to the capitalization of services of physicians and public institutions by compensation companies as well as by the Charity Hospital and private institutions. Fees collected by hospitals for professional services from persons able to pay or covered by insurance legitimately belongs to the profession and such fees should go to the indigent physicians' fund.

The public should be educated to the fact that the compensation law does not compel an individual to go to a certain physician since the employer is required to furnish only adequate medical attention and the injured person should seek at all times his family physician, as there should be nothing to break the relationship between the individual and the family physician. The profession should investigate the compensation law with regard to compulsory medical service and seek appropriate legislative relief, as state eleemosynary institutions are accepting compensation cases who rightfully belong to private institutions.

The physician himself should not overcharge for services rendered compensation companies simply because the bill is to be paid by the compensation companies. Unnecessary visits should not be required in a compensation case in order that the physician himself might bring the total bill for services up to what is thought to be a reasonable fee. It is realized that insurance companies are not in the compensation business for their health but for the purpose of making money, however they should be treated fairly. It is believed the existing schedule of medical fees is gauged upon too small a scale and has a tendency in many cases to cause a physician to require additional visits by the patients, and may create the tendency toward lowering the character of work performed by the physician or the delegation of treatment to an office attendant. This should be corrected by the adoption by the profession of a minimum fee schedule for handling such cases. It is further believed it is not proper for some employers of labor to insist upon having their insurance doctor sign the disability slips in order that wages may be paid the injured.

4. **Political Abuse.** Attention has been directed to the fact that many state and city employees, because of their political connections, receiving adequate salaries are encouraged to enter and accept free service from state charitable institutions thereby working a hardship upon the private institutions and an injustice to the physicians upon the staff who render professional services to these cases. It has been stated that a vast majority of the fire and police departments receive medical and professional care through our Charity Hospitals. In this connection it must be remembered that the bread winner in the family should receive consideration only if he himself is incapacitated and his illness places upon his shoulders a burden he cannot remove.

C. **Private Hospitals.** The profession objects to this charity abuse and attention is directed to the fact that hospitals now have a flat rate to fit any pocketbook, and publicity should be given to the public in this matter. The private institution should have proper facilities for the prompt receiving and handling of ambulance and emergency cases with

the view of diverting all cases that are not strictly charitable into the private institutions where they justly belong and a social service worker is necessary at all times to accomplish this,

Patients entered into private institutions as charity cases and operated upon gratis can hardly afford to maintain special nurses at fifteen dollars per day for day and night services if they are truly deserving of charity. The hospital council should be requested to direct their attention to the elimination of persons able to pay such fees.

D. **Clinic Abuse.** The profession positively opposes any further creation or establishment of free clinics as it is believed most advisable to centralize this form of service under the direction of efficient medical supervision and adequate proficient social service to guarantee the minimum amount of abuse. It is believed when the clinics of the charity hospitals are purged of imposters they will have ample facilities to care for the entire group of needy citizens of the state. It is further believed that all free clinics should be so placarded so as to make the individual conscious of the service he is receiving and he should be worthy of it. Every physician working in a free clinic should be alert to detect imposters and insist upon the removal of such patients who are able to pay for services. Every institution maintaining a free clinic or free bed service should be required to have a proficient social service department. Clinics should not receive aid from the Community Chest for their operations especially in the case of part-pay departments. The payment of any fee in any clinic is thought to be objectionable as it encourages abuse and they should either be run as a private pay clinic or as a charity department. Opposition is expressed to the abuse of city and state laboratories and clinic departments as roentgen ray, etc., both on the part of the profession and unworthy patients.

III. Welfare Abuse.

A. **Child Welfare.** Solicitation of obstetrical, feeding cases, etc., through the Child Welfare organization should be stopped by enforcing the Child Welfare organization to abide by the working agreement entered into between them and the Orleans Parish Society during 1931. Welfare organizations soliciting unworthy patients should be reported to the Community Chest for removal from the list for allotment of funds.

B. **Industrial Insurance.** These companies, it must be remembered are in business for profit and not for welfare of patients or physicians, and the public should be given this fact.

C. **Health Units in Parishes.** It is not denied that these organizations may serve the state for purposes other than charity cases, working both a hardship and imposition upon the members of

the Profession. The aid of the State Board of Health is necessary and should be solicited in arriving at a solution to this problem. We must take cognizance of the fact that there are specialists in practically every line in each community. A demand should be made for their cooperation in correcting this abuse, for in this way only can they aid themselves.

IV. Medical Schools.

The cooperation of the Boards of the Medical Schools should be solicited, requesting the discontinuance of professional consultations by full-time members of the teaching staffs whether the fee reverts either to the school or to the physician because it is believed that the Medical Schools are established primarily for the teaching of students, and should not place themselves on the basis of competitors with their graduates or with other members of the profession.

Again the operation of clinics, free or part pay, by universities without proper social service department and through the use of private appointments is to be condemned as such schools become a most unfair and aggressive competitor. The use of state institutions for the care of students covered by medical fees and the abuse of such institutions can easily be remedied through cooperation of the universities.

VI. Compensation and Insurance Companies.

The existing fee schedule of these companies is most enthusiastically condemned and it is believed the medical profession should establish a minimum fee schedule for this class of patients.

VII. School Boards and Their Welfare Organizations.

The school boards should not engage in the practice of medicine nor should their nurses function in the capacity of physicians nor should they employ the use of untrained or lay workers in functioning in the capacity of physicians (this particularly refers to examination of ears by means of audiometer recently installed). The wholesale and indiscriminate use of prophylactics should be discontinued and the Medical Staff of the School Board should be used only in an advisory capacity and under no consideration should they treat pupils or teachers without additional compensation.

VIII. Boards of Health—State and City.

This institution should not indiscriminately advertise and direct the public to the public health institutions or board of health centers for treatment and prophylaxis. These institutions should cooperate with the profession and therefore provide the medical man with work instead of depriving him of it. The President of the State Board of Health can be of great assistance here.

There is a distinct paucity of fees as paid by the state for testimony and it is extremely difficult to collect expert fees from the state.

The profession should always in giving ordinary and expert testimony be honest and ethical on the stand in the same way as they are expected in the general practice of the profession. The physicians should protect their fees through legislation and prevent themselves from being used as a pawn by legal counsel, concerning physicians' fees for the insurance company through the utilization of physicians' certificates in court rather than paying for the testimony.

I. Abuse by the Profession.

It is to be admitted that the profession itself must plead guilty in a measure, both with respect to the profession and the individual. The physician himself, is instinctly lenient, not desiring to commercialize his knowledge or to impose upon others, however, he, himself, has grown lax through the improper use of state laboratories and reference of patients to free clinics and hospitals. In suggesting a remedy for such abuses, it must be realized that there must be full cooperation and team-work among the members of the profession and we must regain the faith of the profession in organized medicine, as only by presenting a solid front can these abuses be eliminated or minimized. The profession should endeavor to prevent shifting of patients who make a habit of not paying medical fees already contracted, for when a person does not pay one physician it is generally true that he does not pay any physician. The first step in this movement must be taken in the direction of purging our own ranks of the faults which are ours (lack of cooperation, lack of interest, lack of proper education of the medical man, lack in the proper handling of the individual patient, lack of a central collection and investigating agency). The columns of the Medical Journal may be used to great advantage in the handling of the profession itself.

Next, it will be necessary to eliminate the faults that lie beyond the bounds of the profession. The public itself must be educated through the newspapers, the radio, and made conscious of their duty to themselves and their fellowmen by bearing their share of the expense for medical care when they are able to pay for the same. An abuse upon the charity of the community is a direct abuse against the public, for it is the individual who pays in large taxes for the care and attention of the poor in charitable institutions and when these sums are improperly expended for the care of unworthy patients the imposition is upon the public and the poor themselves are necessarily greatly deprived of much service which should be justly theirs.

It is believed that Hospitals accepting part pay for patients cannot carry charity departments and that they should not forever cry for funds from the public to maintain said institutions. It is

further believed that when such charity clinics are eliminated these hospitals can make sufficient money to overcome the usual deficit and will probably show a profit which ultimately will enable them to reduce rates in hospitals. In many cases at the present time, only the hospital that can draw on a general or a national fund can overcome a deficit without assistance from the local community. It is recommended that the aid of the Orleans Parish Medical Society, the State Medical Society, the American Medical Association, The College of Physicians and the American College of Surgeons, and the American Hospital Association be solicited to assist in the broader scope of this movement.

7. Such organizations as the Community Chest, Association of Commerce, the City and State Boards of Health, the School Boards and Hospital Councils should be encouraged to help in this movement. It is further recommended that Civil suits on test cases by state authorities should be instituted to make the public cognizant of their abuse and liability. It is further recommended that, at another time, such abuses as counter prescribing at drug stores, the use of technicians and anesthetists filling the place of physicians in the laboratory should be referred to a Committee for Investigation.

It is earnestly believed that this movement has possibilities and all that is needed is the encouragement, willingness and cooperation of the members of the profession.

The Medical Forum urges the Orleans Parish Medical Society to appoint all necessary committees to consider these abuses individually and make every effort to investigate and to correct these abuses mentioned without delay.

Respectfully submitted,

Medical Forum.

(Entirely composed of members of the Orleans Parish Medical Society).

REPORT OF HOSPITAL ABUSE COMMITTEE ORLEANS PARISH MEDICAL SOCIETY.

Never before in its history has the medical profession of this country been confronted with such a serious problem or its ethical structure more endangered than it is today because of the ever growing number of free and part-pay clinics and hospitals.

We are in a state of transition, and individual medical practice is being rapidly substituted for that in the clinics and hospitals. Since the beginning of the present century this change is taking place. At first insidiously, then with a rapid gaining of momentum, until today we are confronted with a situation that has become so overwhelming that it threatens to engulf us without hope of ever eradicating ourselves. This conditions exists here as well as throughout the length and breadth

of this country. But in New Orleans it is more acute than anywhere else for the practice of hospital abuse here is more pronounced than it is in any other large city of the United States.

In the last twelve years especially, during that period of inflation and prosperity, unique in the annals of the world, when great wealth was easily and frequently acquired, when the governments of the country, states, counties and cities not only levied enormous taxes on willing people, but issued bonds in an unprecedented manner, the millionaires not knowing what to do with their surplus wealth aspired to become philanthropists, and the politicians became unduly solicitous of the welfare of the people, clinics and hospitals were erected in large numbers. In order to fill these institutions the sick, whether deserving of charity or not, not only were encouraged to but were cajoled in soliciting free treatment. Unmindful of the future, our profession not only tolerated the existing conditions, but participated in their promotion and lent itself to further the propaganda which induced a very large proportion of the population to seek, during the period of great prosperity, medical care for which they paid nothing or only a very small fraction of the cost.

Michael M. Davis, Director for Medical Services, Julius Rosenwald Fund, recently said: "Its extension (clinics) in the last 30 years has been such as to justify calling it a new institution in American life and has to make it a widely significant factor in supplying part of the basic necessities of medical care and health promotion." The truth of his statement must be admitted when we realize that the growth of clinics has been from 150 in 1900 to over 7000 in 1931, and that in the past ten years it has increased at the rate of 300 per annum. The Journal of the American Medical Association* editorially commented that although the charity hospitals are overcrowded, yet "some private hospitals are less than half occupied. A general average would indicate 40 per cent empty beds in most private institutions. Since such institutions are largely dependent on donations as well as on the fees coming from patients, their position is today a serious one."

Margaret Plumley in her report "Growth of Clinics in the United States" published by the Julius Rosenwald Fund, attributed this condition to the "large number of immigrants who entered the country and the consequent rise of large centers of population with many wage earners living on very low incomes, made it impossible for doctors to take care in their offices as had been customary earlier." The truth of this statement is easily assailed, because the greatest growth of clinics took place during the period of greatest

*Journal of the A. M. A., June 11, 1932.

economic prosperity this country has ever known, and when wages were at their peak. It was during that time that the wage earner was best able to pay his physician. It was also the period when, with ever increasing numbers they crashed the doors of hospitals and clinics for free treatment, not only in this city but in every large center of the country. Evidently this cannot be a cause of this condition.

Another factor advanced by this author is the establishment of outdoor patients' departments by medical schools. She said: "it was not realized until recently that medical teaching could be conducted with any but 'indigent patients'. The experience of such pay clinics as the Cornell Clinic in New York and the University of Chicago clinic, has, however, proved that this assumption was unfounded." Her statement is food for thought. Heretofore we have not been confronted with this problem, but because of the recent establishment of a university clinic here, there is always a potential danger of its becoming a part pay clinic and thereby invading the ranks of the middle class. The Journal of the American Medical Association has editorially expressed itself on this subject as follows: "A school has no right to com-

by which the evil of hospital abuse can be minimized, but despite all our efforts it has grown to formidable proportions. Because of the large number of free hospital beds and of the multitudes of patients who flock to our charity clinics this city is placed in the unenviable position either of having the largest number of paupers, or of having the greatest number of medical panhandlers of any community in the United States and perhaps in the world. Yet it can not be truly asserted that we are a community of paupers for during the present depression New Orleans has had proportionately less unemployment than any other of the large cities of this country, yet our proportionate amount of free medical service is far in excess to that of other communities. The truth of this statement is borne out by the following statistical study of our charitable institutions:

1. The number of new cases in the out-door clinics of the Charity Hospital grew from 26,619 in 1920 to 80,750 in 1929, and diminished to 65,432 in 1931.
2. The number of accident cases treated in that institution increased from 11,712 in 1920 to 29,627 in 1929 and to 33,561 in 1931.

CHARITY HOSPITAL

Year	Admissions		Clinics		Accident	Surgical	Obstetrical Department	
	City	Country	New Cases	Consultations	Cases	Operations	Cases	Births
1920	8,580	7,419	26,619	69,608	11,712	8,713	1,901	396
1921	10,102	7,207	33,851	79,332	15,293	14,117	2,409	831
1922	10,059	7,220	40,640	93,092	16,903	14,006	2,597	1,008
1923	11,926	8,639	41,434	101,566	19,383	16,405	2,961	1,115
1924			50,789	178,811	23,624	13,819	3,499	1,218
1925	15,474	10,479	58,000	204,618	25,427	13,762	3,747	1,250
1926	16,214	11,079	58,119	206,845	26,423	11,462	4,056	1,340
1927	17,824	11,138	63,346	229,400	28,234	14,186	4,206	1,530
1928	18,666	12,667	72,537	260,054	30,285	15,967	4,569	1,583
1929	20,754	15,088	80,750	282,378	29,627	19,201	4,876	1,666
1930	24,238	18,389	70,878	276,462	31,383	23,722	5,678	1,955
1931	25,328	20,155	65,432	318,735	33,561	26,124	6,733	2,566

pete unfairly with its graduates. It should not exploit its full-time professors, and the number of beds provided by the schools shall not exceed the number necessary for teaching purposes."*

Other contributing factors are the increasing cost of medical attention, the rise of specialism, the expensive laboratory aids in diagnosis, the gradual disappearance of the family physician.

We are confronted with a serious condition that is becoming general throughout the United States. It can be truly asserted that it exists, to a superlative degree, in this city. Meetings have been held by this Society to discuss ways and means

3. The total number of admissions from the city (country patients excluded) grew from 8,580 in 1920 to 20,754 in 1929 and to 25,328 in 1931. The increase of admissions of city patients for the years 1920 to 1931 inclusive was 183 per cent or 15 per cent per annum, and of the country patients 171 per cent or 12 per cent per annum.

An analysis of the above figures shows that 46,911 residents of this City were treated at the Charity Hospital in 1920, and 131,131 in 1929, an average yearly increase of 8,422. In 1931, 124,321 were given medical attention at that institution, or 6,810 less than in 1929. This conclusively proves that the largest increase of patients from this City in the Charity Hospital took place during the period of prosperity and of high

wages and was not caused by the present depression.

A survey of the histories filed in the Charity Hospital shows:

Medical cases: 1920, 5,181; 1931, 11,690; increase of 125 per cent.

Surgical cases: 1920, 7,636; 1931, 22,433; increase of 194 per cent.

Gynecological: 1920, 1,694; 1931, 4,655; increase of 180 per cent.

Obstetrical cases: 1920, 1,901; 1931, 6,733; increase of 255 per cent.

Of special interest to us is the large number of accident cases treated in the Charity Hospital. Approximately 92 individuals per day are treated in the emergency service of the Charity Hospital. An incredible number. Evidently this phase of medical practice is taken care of exclusively by the Charity Hospital.

In order that we may form an idea of the enormous amount of the free medical work performed in this city I will quote the figures of Dr. J. C. William Geefe, Commissioner of Hospitals for the City of New York.

The Department of Hospitals for the City of New York which comprises all the municipal hospitals had in 1930 a total bed capacity of 16,711, and a total number of admissions of 180,652. 12,755 children were born in these institutions and 372,684 persons made 1,347,552 visits in the dispensaries during that year. He states that "from these statistics it would appear that one person out of fifteen of the population of the entire city receives service from the activities conducted by this department." Although New York has approximately a population 15 times greater than that of New Orleans, in 1930 the total bed capacity of its municipal hospitals was only 9 times larger, the total number of admissions was only four times greater, the number of births was only six times more and the number of clinic patients and clinic consultations 5 times more than those of the Charity Hospital.

After deducting the number of admissions from the country it may be conservatively stated that about one out of every 3.5 of the population of this city was the beneficiary of the charity of our great institution.

Approximately 124,000 residents of New Orleans received medical service in the Charity Hospital, yet only 111,936 families, the average size of which is 3.35 persons, reside in this City.

Thirty-six per cent of the total deaths in New Orleans occurred at the Charity Hospital.

Twenty-six per cent of all births registered in New Orleans took place in the Charity Hospital.

These figures apply only to one institution, the Charity Hospital. These ratios are still further increased when the number of charity patients treated in Touro Infirmary, the Mercy Hospital

and the Eye, Ear, Nose and Throat Hospital are added to those of the Charity Hospital.

Clinics: New Cases:

Charity Hospital	65,432
Touro Infirmary	12,090
Mercy Hospital	3,457
Eye, Ear, Nose and Throat.....	11,214

Total..... 92,693

Population of New Orleans, 474,000.

Ratio to population: 1 to 5.

Admissions:

Charity Hospital	25,328
(country patients excluded)	
Touro Infirmary	2,290
Eye, Ear, Nose and Throat.....	3,000

Total..... 30,618

Ratio to population: 1 to 15.

Free operations Charity Hospital..... 17,000
(based on proportion of city and country patients.)

Touro Infirmary	5,055
Eye, Ear, Nose and Throat.....	3,000

Total..... 25,055

Ratio to population: 1 to 19.

The number of duplications is not large enough to materially chance these proportions.

The facts I have presented to you show an intolerable state of affairs, not only insofar as it affects the medical profession but the general public as well. Its causes are many and are far reaching, but one of the greatest contributing factors for this abuse is the apathy of the doctors of this city and state.

Whilst it is logical to expect an increase in the number of charity patients in our institutions because of the depression and the large amount of unemployment and reduced wages, yet this condition has been gradually increasing during the past thirty years, and its greatest growth has taken place in the past twenties, when wages were at their peak and labor in great demand. It certainly could not be said then that more than one-third of the population of our city were so pauperized that they were unable to pay the fees of a physician.

How have the doctors of this city and state contributed to this condition?

1. By the establishment of free clinics by groups of physicians when there was already a plethora of medical charity. Even very recently attempts were made to establish new clinics by some members of the staff of the Baptist Hospital and of the Hotel Dieu. A few days ago the Medical Department of Tulane University opened the doors of its new clinic to the public.

2. By the division of opinion that exists among the profession of this city as to the advisability of having a social service to weed out the undesirable patients. Influential members of our Society have even expressed themselves as advocating the open door to all.

By the desire of many doctors of having large clinics at all cost and the mad scramble for hospital beds and operating material.

4. By the recommendations for admissions by physicians of patients who may be able to pay the specialist if not his fee at least a moderate remuneration for his services.

5. By physicians in the country recommending patients to the care of the Charity Hospital who are well able to pay their way in private institutions.

6. By neglect of some of the leaders of our profession, who may not be themselves affected by this abuse, in using the weight of their influence or in giving their full cooperation in demanding from hospital authorities the needed reforms.

The other factors which have brought about this condition are:

1. The improvidence of the people.
2. Budget buying of ill afforded luxuries.
3. Lack of thrift and the forgetting that in times of plenty it is well to prepare for times that are hard.

4. The incongruity of the human nature which impels a man to provide handsomely for his funeral and yet makes no provision for sickness.

5. Greed in its monstrous aspect. Getting something for nothing even at the expense of the health or life of a deserving poor.

6. The solicitation and advertisement of social agencies.

7. The growing idea that the best treatment is to be had in the charity clinics.

8. The injudicious publication in the daily press of exorbitant medical fees and exaggerated accounts of the high cost of hospitalization.

9. The rise of specialism and the increasing perplexity of medical practice have increased the cost of diagnosis and treatment. The referring by his doctor of a patient from specialist to specialist with the usual multiplicity of expensive laboratory procedures, have in many instances proven to be a burden to the individual sick, which disgusted him with the individualistic methods of practice and impells him to recourse to the free or part pay clinics.

RECOMMENDATIONS

1. Efficient social service departments should be established by institutions having free departments. Only the worthy poor should be entitled to the privileges of these institutions. Certain definite standards relative to the income, wages, etc., based on the number of dependents should

be established. This standard should be uniform. A central bureau, or clearing house, should be established for the purpose of preventing undeserving individuals who have been refused admission in an institution from being admitted in another.

2. This Society should recommend to the administrators of the private institutions of this city the establishment of an independent ambulance service. This Society should insist also that the wish of the injured that he be transported to the hospital of his choice be recognized by the Charity Hospital. The ambulance service of the city of New York responded to 205,011 calls during the year 1930—94,235 were transported to the public hospitals and 110,766 to the private institutions. It is felt that this change in the ambulance service can be established to the satisfaction of all parties concerned.

3. We should recommend to the management of the private hospitals that they organize an efficient accident department capable at all times to give immediate attention to accident cases. In order to overcome the growing tendency of the people of this city to rush in cases of accidents, whether severe or mild, to the Charity Hospital, this innovation should be given due publicity by the private institutions. Only first aid treatment should be given by the hospital staff, in every case all possible effort should be made to reach the patient's physician. The public should be advised that the care and attention given at this institution is not free but must be paid for by the injured.

4. The treatment of compensation cases in the Charity Hospital is unfair to the doctors as well as to the public. We are sure that the administrators of the Charity Hospital feel as we do that this policy although very unfortunate and not equitable to the members of its staff is to be considered at this time a necessary evil.

It is suggested that this Society should exert all its influence to force the indemnity companies to procure their own hospitals, or to make the necessary arrangements with private institutions for the care of their insured. They should have their individual ambulance service. This can easily be accomplished to the full satisfaction of all parties concerned.

5. This Society should frown upon any unethical advertisement, publicity or solicitation on the part of social agencies and free and part free medical institutions. It is within the power of this body to insist that these institutions abide by the code of ethics of the medical profession. It is unfair for the doctors of this town who are restricted from the use of any form of advertisement by their code of ethics to be forced to compete against such practices.

6. Members of the component societies of the Louisiana State Medical Society should be addressed by representatives of this Society relative to the question of hospital abuse. Not only should they be acquainted with the existing state of affairs, but their help should be solicited to combat same.

7. The Charity Hospital is not and has never been intended for the use of politicians who receive remunerative salaries from the community, or for their henchmen who are fully able to pay for medical attention. This form of abuse is reprehensible. This must be discouraged, and if necessary, the Governor of the State should be approached by a committee of this and the State Societies to acquaint him with this evil and with the far reaching consequences which may accrue therefrom.

8. The most effective means to remedy the indiscriminate use of the charities of our public institution by the medical grafters is the publication of the names and addresses of the inmates of our state owned general hospitals. It is to be distinctly understood that the character of the illness, etc., must never be divulged. But we feel that for a deserving individual to receive the care and attention of our public hospitals is commendable and certainly is not and can not be considered a disgrace. Therefore, we do not see why there should be any objections to the publication of these names because it will only affect the medical grafter who knows himself to be or his neighbors will know that he is robbing a deserving patient of the comfort to which he is entitled to. Such individuals are not deserving of any consideration.

A. E. Fossier, M. D., Chairman.

A RESOLUTION TO THE SECRETARIES OF THE PARISH OR COUNTY MEDICAL SOCIETIES:

The following resolution was passed by the Fulton County and Cobb County (Georgia) Medical Societies at their regular meetings a few weeks ago after the reading of a paper entitled "The Economic Status of the Medical Profession," which appeared later in the Journal of the American Medical Association, October 15, 1932, Page 1358, under the Department of Medical Economics.

Since this article appeared, we have had numerous letters from physicians all over the United States urging that this plan be placed before the different county, state and national societies for their consideration and adoption.

We are asking that you place this or a similar resolution before your society and ask for its adoption. Have it signed by your proper officials

and forward to the secretary of the Medical Association of your state.

These resolutions will be placed in the hands of the delegates to the American Medical Association at its next annual meeting.

RESOLUTION

Whereas, The medical profession of the United States is suffering losses all out of proportion to its ability to endure; and

Whereas, Our losses are not so much due to the financial depression as to over production of doctors and decreased demand for paid medical service generally; and

Whereas, The production of doctors is far in excess of the population increase,

Therefore, We the members of the _____ County Medical Society respectfully request the Medical Association of _____, the other State Medical Associations, the Southern Medical Association and the American Medical Association to adopt this or similar resolutions requesting the Medical Colleges of the United States to reduce the number of graduates each year until the law of supply and demand has been fully complied with. The number of graduates to be determined by a national committee appointed by the President of the American Medical Association.

Respectfully submitted,

_____, M. D., President.

THE FINAL REPORT OF THE COMMITTEE ON THE COSTS OF MEDICAL CARE

Advanced proof sheets of this report have been submitted to the New Orleans Medical and Surgical Journal. The final report comprises 125 pages of material, which summarizes and draws conclusions from the large number of publications issued by the Committee that have already appeared in the public press. The recommendations of the majority of the Committee is discussed in detail, and the recommendations of the minority group are likewise presented so that the reader may appreciate that there is not complete unanimity of thought about the report. The recommendations of the Committee as a whole follows:

RECOMMENDATIONS OF THE COMMITTEE

1. The Committee recommends that medical service, both preventive and therapeutic, should be furnished largely by organized groups of physicians, dentists, nurses, pharmacists, and other associated personnel. Such groups should be organized, preferably around a hospital, for rendering complete home, office and hospital care. The form of organization should encourage the maintenance of high standards and the develop-

ment or preservation of a personnel relation between patient and physicians.

2. The Committee recommends the extension of all basic public health service—whether provided by the governmental or non-governmental agencies—so that they will be available to the entire population according to its needs. This extension requires primarily increased financial support for official health departments and full-time trained health officers and members of their staffs whose tenure is dependent only upon professional and administrative competence.

3. The Committee recommends that the costs of medical care be placed on a group payment basis, through the use of insurance, through the use of taxation, or through the use of both these methods. This is not meant to preclude the continuation of medical service provided on an individual fee basis for those who prefer the present method. Cash benefits, i. e., compensation for wage-loss due to illness, if and when provided, should be separate and distinct from medical services.

4. The Committee recommends that the study, evaluation, and coordination of medical service be considered important functions for every state and local community, that agencies be formed to exercise these functions, and that the coordination of rural with urban services receive special attention.

5. The Committee makes the following recommendations in the field of professional education: (A) That the training of physicians give increasing emphasis to the teaching of health and the prevention of diseases; that more effective efforts be made to provide trained health officers; that the social aspects of medical practice be given greater attention; that specialties be restricted to those specially qualified; and that postgraduate educational opportunities be increased; (B) that dental students be given a broader educational background; (C) that pharmaceutical education place more stress on the pharmacist's responsibilities and opportunities for public service; (D) that nursing education be thoroughly remoulded to provide well-educated and well qualified registered nurses; (E) that less thoroughly trained but competent nursing aides and attendants be provided; (F) that adequate training for nurse-midwives be provided; and (G) that opportunities be offered for the systematic training of hospital and clinic administrators.

The recommendations were signed by thirty-seven of the Committee. The minority report was drawn up and signed by Dr. A. C. Christie, Dr. George E. Follansbee, Dr. M. L. Harris, Dr. Kerby S. Howlett, Dr. A. C. Morgan, Dr. Olin West, Dr. Robert Wilson, and Dr. N. B. Van Et-

ten. It will be noted that all of these dissenters are doctors of medicine. There were, however, sixteen medical men in all who agreed with the findings of the Committee. Two members of the Committee submitted brief statements explaining why their views disagreed with both the Committee report and the minority report which is as follows:

RECOMMENDATIONS OF THE MINORITY GROUP

1. The minority recommends that government competition in the practice of medicine be discontinued and that its activities be restricted (a) to the care of the indigent and of those patients with diseases which can be cared for only in governmental institutions; (b) to the promotion of public health; (c) to the support of the medical departments of the Army and Navy, Coast and Geodetic Survey, and other government service which cannot because of their nature or location be served by the general medical profession; and (d) to the care of veterans suffering from bona fide service-connected disabilities and diseases, except in the case of tuberculosis and nervous and mental diseases.

2. The minority recommends that government care of the indigent be expanded with the ultimate object of relieving the medical profession of this burden.

3. The minority joins with the Committee in recommending that the study, evaluation, and coordination of medical service be considered important functions for every state and local community, that agencies be formed to exercise these functions, and that the coordination of rural with urban services receive special attention.

4. The minority recommends that united attempts be made to restore the general practitioner to the central place in medical practice.

5. The minority recommends that the corporate practice of medicine, financed through intermediary agencies be vigorously and persistently opposed as being economically wasteful, inimical to a continued and sustained high quality of medical care, or unfair exploitation of the medical profession.

6. The minority recommends that methods be given careful trial which can rightly be fitted into our present institutions and agencies without interfering with the fundamentals of medical practice.

7. The minority recommends the development by state or county medical societies of plans for medical care.

We feel that the majority of the practitioners of medicine will be in accord with the recommendations of the minority group. It is unfortunate that the minority group did not have something more definite and more specific to

recommend. This group, incidentally, write that they are in accord with the majority in many of their conclusions and recommendations but they say that they think that they would fail in their duty, both to the public and the medical profession, if they did not point out what they conceived to be unwise recommendations. They state in discussing their recommendations, that the community medical centers, the Committee's most fundamental specific proposal, would be far beyond any possibility of its ultimate value and is an idealistic plan based almost solely upon theory. With this opinion we again believe that the majority of physicians will subscribe. Insofar as contract practice is concerned, the minority is willing to recommend it only if certain objectionable features, which they specify, can be eliminated.

It will be impossible to discuss fully or adequately this report. By the time this announce-

ment is made the report will probably be available for more thorough study. We would urgently recommend that the physician secure a copy of the report and scan it closely. There can be no doubt that this report will be read by many intelligent laymen and that it will be the basis of discussion and of the presentation of many schemes to alter the fundamental principles of the practice of medicine. Physicians, to combat any idealistic, unpracticable, and unworkable schemes, should be familiar with the contents of this report.

While disagreeing with many of the suggestions advanced to alter medical care, nevertheless one can not help but feel that there is tremendous credit due to the members of the Committee who have labored long and faithfully to secure most important factual information concerning the practice of medicine with all its allied and coordinated subdivisions and ramifications.—(Editor.)

HOSPITAL STAFF TRANSACTIONS

FRENCH HOSPITAL.

The regular monthly meeting of French Hospital Staff was called to order Thursday, October 20, 1932, at 8 P. M. Dr. M. J. Lyons presided in Dr. Alsobrook's absence. The minutes of the last meeting were read and approved. The secretary then read the report of discharges for the previous month. A case of septicemia due to a staphylococcus aureus infection of the lower lip was opened to general discussion. The House Physician outlined the progress of the disease and treatment of the case which consisted mainly of compresses, blood transfusions and incision of the lip to check the spread of infection to the cavernous sinus. Dr. M. O. Miller was of the opinion that no surgery at all is indicated in such cases, and that blood transfusions are the main thing; even so, they are practically all fatal.

An interesting case of agranulocytosis, in the hospital at the time, was presented. Dr. Ane stated that with roentgen ray therapy over the long bones and blood transfusions the cell count had risen from 1500 to 3600 and the neutrophils from 0 per cent to 20 per cent in a considerably short period of time.

The Chairman then presented Dr. M. O. Miller who read a paper on "Malignancy of the Gastro-intestinal Tract." The early diagnosis of carcinoma of the stomach is very difficult as the symptoms are vague. Loss of appetite, loss of energy, anemia and gastric distress are the main signs. Hemorrhage and radiation of pain are late symp-

toms. At least one third of gastric carcinoma is operable.

Death comes comparatively early in carcinoma of the small intestine. However, when a diagnosis is arrived at the surgeon should perform an enteroanastomosis.

In carcinoma of the large bowel a growth is present, there is profound anemia and indefinite signs of chronic colitis or appendicitis. Metastasis is rather late in carcinoma of the colon. The treatment of carcinoma of the colon surgically is anastomosis between the transverse colon and the ileum or a colostomy with resection later. Carcinoma of the rectum may be diagnosed by proctoscopic, digital or roentgen ray examination. Exploration with colostomy and resection later is the surgical procedure.

Dr. L. J. Menville spoke on the radiological aspects of acute intestinal obstruction. Roentgen ray helps to make the early diagnosis of acute intestinal obstruction possible. Sharp, intermittent colicky pains are the only physical findings. The presence of an accumulation of gas in the intestinal tract with a fluid level is always indicative of some pathology. The "step ladder" and "herring bone" patterns seen in the intestines on roentgen ray pictures are typical of cases of obstruction. This and the above signs are enough to make a diagnosis of acute intestinal obstruction and warrant the surgeon's going into the abdomen. Not more than twenty-four hours should elapse without surgical intervention after

the first symptoms are seen. Dr. Menville illustrated his points with roentgenograms of cases of obstruction at the hospital within the last few months.

The papers were discussed by Drs. Brown, Lyons and Loria.

Cuthbert J. Brown, M. D.

SURGICAL STAFF OF CHARITY HOSPITAL.

The Surgical Staff of Charity Hospital held its regular meeting on October 29, 1932. The meeting was called to order by Dr. I. M. Gage, Chairman. The minutes of the previous meeting were read and approved. Dr. I. M. Gage, Retiring Chairman, expressed thanks to the Staff and the Department of Pathology for their sincere co-operation. He suggested that a biochemist be invited to attend meetings, and that this step be taken during the coming year.

Dr. A. C. King moved that visiting members be eligible for Chairmanship. Dr. P. Graffagnino made substitute motion that a committee be appointed to draw up By-Laws and incorporate this in same.

Dr. J. D. Rives was unanimously elected Chairman; Dr. Emile Block, Vice-Chairman, and Dr. Rogers Brewster, Secretary.

Dr. Graffagnino moved that a committee be appointed to draw up suitable By-Laws for Surgical Staff. The Committee appointed consisted of Dr. Alton Ochsner, Chairman, and Dr. Emmett Irwin and P. Graffagnino as the other members of the Committee.

Rogers Brewster, M. D.

HOTEL DIEU

The regular monthly meeting of Hotel Dieu Medical Staff was held on Monday, October 17, 1932 at eight P. M., Dr. P. L. Thibaut, Vice-President, presiding, and Dr. J. E. Isaacson, Secretary, at the desk.

I. Dr. Edmond Souchon presented a paper on "Appendicitis During Pregnancy," abstract of which follows:

Within nine years, covering nine hundred to one thousand confinements, we have not had a single case of appendicitis. For the purpose of study, these confinements were divided into groups, covering: (a) Constipation—susceptibility to, and manner of overcoming; (b) Diet—with normal appetite, with abnormal appetite, and special diets; (c) Medication—cod liver oil and viosterol for some, dicalcium phosphate for others, and still others who neglected to take the medication ordered.

The following questions arise: Are the mechanics of the intestinal function entirely changed due to the lifting of the bowels away from their normal position? Is the intestinal flora changed during pregnancy so as to prevent formation of

fecaliths or prevent putrefaction? Is appendicitis absent because the expectant mothers are more careful about their general condition than usual? Is it the production of unknown endocrines brought about during pregnancy that changes the intestinal function? Is the change of blood chemistry responsible? This paper advances no conclusions; the questions are intended only to provoke discussion for the subject requires much deeper study than it has been given.

The literature covering this subject is practically nil, and has not been given the amount of observance it should require.

Dr. L. A. LeDoux: Our pre-natal interest in women safeguards them far beyond the usual medical complications. The expectant mother is usually quiet and under the supervision of a physician whose first attention is to her bowels. To similar attention and care is attributable the fact that the late Dr. C. V. Unsworth, in twenty-five years at DePaul Sanitarium, never encountered a patient there who required appendectomy.

Literature on this subject seldom gives a reason for the apparent termination of pregnancy by operation in the first trimester. It is my opinion (based on a series of eighteen cases in which abortion followed the operation for appendicitis only when ether had been the anesthetic agent) that ether, a lipoid solvent, acts not only on the ovary but also on the placenta, and that the use of ether as anesthetic is to a greater extent responsible for terminations than the manipulation of the abdomen during surgical procedure.

Dr. P. L. Thibaut recalled only one case of appendicitis operated on during pregnancy—at the beginning of the third month. In this case, ether had been the anesthetic used, and the case did not abort.

II. Dr. Maurice Gelpi presented a paper on "Closed Drainage for Empyema", abstract of which follows:

I have felt for a long time that there is too much unnecessary open drainage being done for acute empyema; hence the selection of this subject. Closed drainage, as you know, is not a new method of treatment; it goes back as far as Hipocrates. Hedblom's historical review of this subject is a masterpiece and I recommend it to you.

Many ingenious methods have been used for closed drainage of the chest. It was from Dr. Danna, however, that we learned the value of pneumothorax in draining completely a thorax full of pus; he believes that closed drainage should be done by repeated aspiration only—always replacing the same amount of air as the amount of fluid removed. He re-aspirates as often as necessary. We have tried to provide for subsequent drainage after the cavity refills, by leaving in a tube for the purpose. We believe our

plan carries a little advantage in view of the fact that repeated surgical procedure is thereby made unnecessary.

Dr. J. E. Landry: During the "flu" epidemic of 1919, we did many open thoracotomies, with often fatal results. My attitude changed after we did closed drainage, followed by frequent aspirations, on cases too sick to operate. The patients recovered and I have ever since used the closed method. Sometimes I use Dakin's solution, first aspirating three or four syringefuls of pus, injecting the same amount of Dakin's and then replacing with air. This gives me better and cleaner drainage than by aspirating without this solution.

Dr. E. H. Walet called attention to the fact that thoracotomies should not be done too early in the acute stage, for fear of spreading infection. He mentioned a case of double empyema, for which bilateral drainage was done every four hours, using a cannula replaced by a catheter, forming a practically closed cavity. Dakin's was employed to dissolve the immense flakes that would have clogged the drainage.

Dr. S. C. Jamison: Medical men have done closed drainage for years; the procedure would have had a great deal of vogue except that it was ridiculed by the surgeons.

Whenever this method fails the reason is that procedure is begun entirely too soon—while the chest is forming pus. First the lymphatics must be sealed up; then the pleura must adhere around the empyema cavity; at the same time we are allowing the patient to vaccinate himself to raise his immunity—we are giving an embarrassed auricle a chance to empty itself. Our method is to wait four or five days, then aspirate a few times at four-day intervals, always replacing by air. If there is any question about the cavity, a little lipiodol is injected; this can be watched under roentgen ray as it goes around the sulcus. If a little air is also injected, the height of the cavity can be determined. The air rises above—the lipiodol below. After about four aspirations, if the patient's entire clinical condition is not normal, he is sent to the surgical ward where it is usually necessary to insert only a tube. The case usually clears up in about a month.

Mortality with rib resection is 40 per cent. This closed method is conservative and extremely successful; there is little trouble with broncho-pleural or broncho-cutaneous fistulas. It is really imperative for tuberculous empyemas.

Dr. Louis Levy described his device for drainage of empyema. It is a metal tube, known as the Colton tube, packed tight full of gauze, inserted in the chest through a very small opening and left there. Copious dressings gradually absorb the pus; the gauze is then removed and the tube repacked. Hospitalization is very much less

than in the rubber tube drained cases; there is very little shock, gradual drainage, gradual expansion of the lung, and excellent results.

In closing, Dr. Gelpi stated:

In answer to Dr. Landry, I can never forget my experience in the army, where I was compelled to wash out these cavities with Dakin's solution, and invariably the lung became surrounded by a hard rind of fibrous tissue, sometimes as thick as your hand. This is so palpably undesirable that for this reason I seldom use Dakin's solution. As regards Dr. Walet's comments, undoubtedly the pocket should be well localized before establishing drainage; also, the technique outlined can be used successfully in bilateral empyema.

Dr. Jamison has pointedly referred to the fact that the technique which we recommend is not new; this point was well established at the beginning of my talk and the subject was brought up for discussion not with the idea of presenting anything original, but in the hope of stimulating more interest in the use of a valuable old procedure, instead of wide open drainage.

As regards lipiodol, this material seems to have some value, particularly in the late stages of drainage when the cavity is almost obliterated. For diagnosis it has a definite field of usefulness. As regards type of infection, in my own hands the treatment outlined has been uniformly successful, irrespective of the bacteriology. Pneumococcal, streptococcal and staphylococcal infections have responded practically in the same way.

Referring to Dr. Levy's remarks in regard to his special bag, I regard this as a mere detail. I make the point that in surgery, where ever you can accomplish your purpose equally well by the use of simple armamentarium, your technique is better for the reason that it is less complicated and therefore less likely to give trouble.

III. Dr. H. R. Unsworth presented a paper on "The Convulsive States." Its purpose was: "... to clarify differential points pertaining to the idiopathic convulsive state and symptomatic convulsive seizures." He grouped them as follows:

(A) Essential idiopathic epilepsy.

(B) Seizures during adolescence, apparently idiopathic, but with a basic epileptic diathesis.

(C) Cerebral epilepsy, with personality changes and later definite spells of periodic unconsciousness and sometimes nocturnal convulsions. In children this causes mental deterioration.

(D) Epileptic equivalent, in which the patients become depersonalized. The explanation for this group is a defective germ plasm.

(E) Nocturnal epilepsy, which usually progresses to generalized convulsive seizures. The explanation, in adult cases, is organic pathology.

(F) Seizures due to intestinal disorders. This occurs only in infants and usually disappears with the approach of adolescence.

Dr. Unsworth touched lightly on seizures seen in alcoholism, uremic states, poisons, and trauma, abscess or tumor within the cranium. He concluded with the hope that the paper "will stimulate more profound thinking on the part of the profession when a case of convulsive seizure presents itself for diagnosis and treatment."

Dr. W. J. Otis: The tragedy in many instances of convulsive seizure in babies during the "teething" stage is the stigmatizing of these children who in later life have no convulsions.

Every attack is not an epileptic convulsion, nor is every so-called convulsion in a neuropath a definite epileptic equivalent. Epilepsy has a classical set of symptoms, and hysteria has its own classical symptoms. It is true a hysteric may have an epilepsy. The distinction is this: The epileptic does not know when he will have an attack; the hysteric dramatically works up to an attack. This is particularly true in medico-legal cases, where the examining physicians must be keen enough to rule out by exclusion. Some hysterics are found to be true traumatic epilepsies, roentgen ray showing parts of the skull cracked; but do not label every seizure or spell "epilepsy"—you do the patient much harm later on.

Dr. L. L. Cazenevete: The convulsive state has been the subject of recent intense investigation. Stanley Cobb of Boston calls attention to as many as fifty-six pathological states in which convulsion may occur. To explain these seizures he offers various physiologic mechanisms which include embryological defects and tissue destruction, which act by altering neural conduction. Congestion, vaso-constriction, asphyxia, and increased intra-cranial pressure may act by means of cerebral anoxemia.

Temple Fay and McQuarrie advance the theory that epilepsy has a hydraulic pathology. Fay believes the predisposing factor in a major seizure is a hydration state, and has advanced the dehydration therapy.

As to heredity, more epilepsy is found in children of migrainous parents than in children of epileptics.

IV. Dr. Lucien Fortier demonstrated with roentgenograms, "An Atypical Case of Pulmonary Tuberculosis." The man, 46 years of age, gave a history of influenza for one week. He was admitted 9/19/32 with temperature ranging from 103 to 104, septic in type, blood count of 10,400 to 5000 total white cells, 84 to 87 polys. Aspiration of chest produced a small amount of clear, straw-colored fluid, no pus, no organisms. On 10/26/32, sputum examination showed the presence of acid fast bacilli. A tentative diagnosis

was made of lung abscess, unresolved pneumonia, diabetes (low grade), and pulmonary tuberculosis. The patient died 10/28/32.

Dr. S. C. Jamison: This case should indicate a lesson to us, the importance of a very careful history. It is easy to mistake tuberculosis for lung abscess, especially the so-called acute exudative tuberculosis (really pneumonia) which undergoes, particularly with people of little or no immunity, very rapid necrosis, and leaves a cavity after the necrotic material is spit out. We are not nearly as likely to see a chronic proliferative process with a slow process beginning at the apices of the lungs.

I see nothing about this picture that would make me think it was not tuberculosis. Certain points, however, make me think it was not an abscess, especially the absence of leukocytosis. With a pyogenic abscess there is a high leukocyte count (about 24,000 to 25,000) especially before the abscess ruptures and the material is spit out. An abscess is inconceivable with a process of ordinary streptococcal pneumonia, and with a leukocyte count which dropped from 10,000 to 5000. Pulmonary tuberculosis is not always found at the apices. The early types generally start under the clavicle; the first manifestation is a "gone tubercle"—a fan-shaped area spreading out to the periphery of the lung. History and physical examination can only tell us that certain pathology exists. Roentgen ray examination could tell nothing more. Diagnosis from roentgenogram is frequently not justifiable.

In this sort of situation, you feel that if you overlook pneumothorax you might not give the patient all possible chances. However, when the patient is very sick, exhausted, etc. one cannot do a pneumothorax. It must be done early.

Dr. W. J. Durel: I agree with Dr. Jamison that this is not a lung abscess. It is evidently a case with an extensive lesion from the peribronchial region spreading over the lung. We must always think of peribronchial "childhood" tuberculosis (rightly called "hilum tuberculosis") as a possible factor; once this was thought to be a general factor, but recently the mass of opinion has been that extension takes place not from the peribronchial lesion but from new lesions which are formed. Extension of lesions (pulmonary) occurs very seldom from the apex to the middle. There are cases of apical lesions, with cavities, but the patients seldom die. A subclavicular lesion as this is, is fatal in 40 percent of cases; beware of this in your prognosis. Make the diagnosis before the bacilli appear.

As to pneumothorax, beware of the idea that it carries no more responsibility than injecting a hypodermic needle. With a purely unilateral lesion there is some infiltration, and pneumothorax is, of course, more favorable than with

bilateral tuberculosis; but the latter should not interfere with pneumothorax.

The Executive Session followed, after which the meeting adjourned promptly at ten o'clock.

Julius E. Isaacson, M. D.

TOURO INFIRMARY STAFF MEETING.

Dr. Urban Maes presided at the regular clinical meeting of the Medical Staff of Touro Infirmary on November 9, 1932.

A case of cerebrospinal rhinorrhea was demonstrated by Dr. David Womack. This patient, a colored female, was discharging about ten drops of cerebrospinal fluid per minute through the nose when bending her head on the chest. The history of the case was that this condition was recognized about four months ago when the patient was referred to the ear, nose and throat clinic because of a coryza. Examination of the nose was negative except for a grayish white mass in the left sphenoid around which the fluid was discharging. Examination of the fluid showed it to be free of mucin, therefore cerebrospinal fluid. The roentgen ray examination showed both antrums cloudy and the left ethmoid clear. There had been no headaches and no other complaint. The only point in the past history of any importance was the fact that in 1927 her left sphenoid was operated upon under local anesthesia because of infection. Dr. Womack expressed the opinion that the case was traumatic in origin, probably due to a gradual weakening of the bony structures involved in the operation. The prognosis was considered bad.

Dr. Kearny mentioned two or three cases which he had seen. These cases usually had headaches which were worse when the flow was least. Dr. Weil stated that the condition was much more common than reported cases would seem to indicate, there being only 69 to 72 cases reported in the literature. The prognosis is bad because of the possibility of meningitis developing. An operation devised for the correction of the condition has only been performed twice, with a fifty per cent mortality. It was not deemed advisable to do anything operative in this case.

Dr. Anderson also mentioned the fact that the condition was not as rare as reported cases would indicate. He has seen six cases in New Orleans. He mentioned the report of one case which was treated by applying a cast to the head and neck, holding the head in extension for six weeks. When the case was removed the rhinorrhea was no longer present and it was considered a cure. He also stated that he thought the mass present in the left sphenoid was the dura.

Dr. Gilbert Anderson showed a patient to demonstrate the end results in a traumatic injury to the skull and occipital lobe of the brain. This young man had been working on a boat

when a large cable broke and struck him in the back of the head, producing a compound comminuted fracture of the occipital bone. The injury had been handled elsewhere, debridement had been done, and some contused brain tissue removed. About six weeks later the patient began to have severe headaches, dizziness, and projectile vomiting, and was seen at this time by Dr. Anderson. He was running a septic type temperature with leukocytosis, and there was some brain exposed through the lacerated swollen wound. The mass was slightly smaller than a golf ball when exposed, and was bathed in a pool of pus. This was drained and packed. During the progress of the case uncovered brain was exposed, studded with abscesses, about the size of a small orange. This was very foul and necrotic, and it was decided to remove it. By means of gradually tightening rubber bands applied at the base of the mass almost the entire occipital lobe of the brain was removed in about six days. Another small mass formed subsequently; it also was removed. At intervals the patient developed some mental cloudiness from which he, however, recovered promptly. On the fifty-second day an interesting complication occurred. The patient developed an epididymo-orchitis. Examination showed no gonococci present, but *B. capsulatus mucosa* was found. The testicle had to be incised and drained. At present the head injury has healed entirely and the patient is well. He does have, however, a residual homonymous hemianopsia of which he is at present unconscious. He is mentally clear.

Dr. I. I. Lemann presented a problem in diagnosis, namely, heart block versus head injury. The history of the case is as follows. A white lady, 55 years of age, was first seen in June 1932 complaining of pains in the leg, headaches, and chronic constipation. For the previous four or five years she had been having pains in the legs upon walking, which would cause her to stop and rest. This condition had become worse in the previous six months. She knew that she had had high blood pressure for the past seven years. In November 1931 she had suddenly gone blind temporarily for a short time. It had not been possible to ascertain whether the "blindness" lasted a few minutes or a few hours. She had then been confined to her bed for five months. Upon examination in June 1932 she had a very unsteady gait. Her heart rate was 92 and regular. Blood pressure was 186 systolic, 100 diastolic. The heart was not enlarged. She was completely blind in her left eye and presented an old choroiditis in both eyes. The urine showed a trace of albumin but was otherwise negative. The diagnosis made at this time was chronic nephritis, hypertension, intermittent claudication, chronic constipation. On October 16, 1932 she

suddenly became dizzy, fell and struck her head. She was seen about 45 minutes later by a member of Dr. Lemann's staff. At that time she was semi-conscious and the bowels and bladder had acted involuntarily. Her pulse was between 50 and 60 per minute, and blood pressure was 140 systolic and 100 diastolic. She was brought to Touro Infirmary immediately and seen by Dr. Lemann about an hour and a half later. At that time she was well oriented. There was a contused lacerated wound over the right temporo-occipital region about one inch long. Pulse rate was 32 and regular. The blood pressure was 160 systolic and 70 diastolic. The question arose as to whether or not this was a case of head injury with possible cerebral concussion or perhaps a cerebral hemorrhage. Heart block with Stokes-Adams syndrome was also considered. It was interesting to note that while the pulse rate had become increasingly slower since the accident, the patient had regained consciousness. Because of the very slow heart rate, heart block was considered and an electrocardiogram was made immediately. At the time the electrocardiogram was made, however, the pulse rate had risen to 60 per minute, practically double the previous rate. This factor in itself was very significant and tended to substantiate the impression of previous heart block. It was doubted whether or not a head injury could have so suddenly cleared up. The electrocardiogram gave a typical picture of acute coronary occlusion. The P-R interval was .2 second, showing defective A-V conduction. There was marked S-T depression and a typical T wave. The diagnosis was, therefore, acute coronary occlusion. The next day the patient was doing very well with a pulse rate of 72 per minute. A pericardial friction rub was noted for the first time. Blood pressure had risen to 200 systolic and 115 diastolic. Crepitant rales were noted at the base of the left lung. This was thought to be a probable pulmonary infarction. Spinal puncture was done which showed a slightly increased pressure but no other abnormality. The pericardial friction rub persisted only for twenty-four hours. On the third day the pulse became very irregular and rapid and an electrocardiogram at this time showed a typical picture of auricular fibrillation. Cheyne-Stokes breathing developed on this day. On the fourth day the patient became stuporous and the temperature rose. She also developed a weakness of the right arm which was interpreted as a cerebral-embolism on the left side. The patient became weaker, lapsed into a stupor from which she did not recover and died with a temperature of 107 degrees. The monoplegia continued to the end, and before death there were signs of bilateral terminal bronchopneumonia. The leukocyte count had ranged between 12,000 and

21,000. The final diagnosis was, therefore, coronary occlusion with transient heart block, auricular fibrillation, cerebral embolism, pulmonary embolism, arteriosclerosis, chronic nephritis, bronchopneumonia. There was no autopsy.

Dr. Heninger stated that coronary occlusion with heart block was rare. He also thought that it was unusual to find a normal sized heart in an individual who had had hypertension for seven years. He then discussed a case of his own with coronary disease and auricular fibrillation without pain.

Dr. Rives stated that from the surgical standpoint a slow pulse in head injury occurs only late in the condition unless there is massive hemorrhage, when there is a rapid rise in blood pressure.

Dr. Lemann, in concluding, emphasized the frequency of painless coronary occlusion. He stated that it was difficult to understand the physiology of this lack of pain.

Dr. Charles Bloom presented an interesting case of encephalitis following vaccination for smallpox. This five year old boy, seen September 9, 1932, weighed only 28¾ pounds. He had been vaccinated on August 1, and had had high fever for two weeks. Three weeks later he began to vomit, and had vomited constantly until the time Dr. Bloom saw him. All possibilities were considered and complete examinations were made. The spinal fluid examination was under pressure, and various cell counts ranged from 400 to 600 cells. The possibility of tuberculous meningitis was considered, and two tuberculin tests were made. These were negative. Dr. Holbrook saw the child in consultation and agreed with the diagnosis of encephalitis following vaccination. The case subsequently died in spite of frequent spinal punctures.

The second case discussed by Dr. Bloom was one diagnosed labyrinthitis. This patient was seen October 24, 1932; had suddenly become ill October 1, 1932 with vomiting, temperature 99, and no other complaint. By October 5, 1932 the child was well again and then three days later he began to have fever and vomiting. On October 12, 1932 it was noticed that the boy usually held his head on the right side or lay on that side, and when his head was turned to the left or he lay on the left side he became dizzy and vomited. On October 20, 1932 he complained of pains in his ear, and paracentesis was done which resulted in improvement for about twenty-four hours. When Dr. Bloom saw the patient there was this nausea when the patient turned his head to the left, definite nystagmus and fever. The possibilities considered were tuberculous meningitis, septic meningitis, encephalitis, and neoplasm. Dr. Daspi saw the patient in consultation and, while his first impression was one of neoplasm,

he later thought of the ear as a possible source of trouble because of the onset of dizziness and vomiting when the patient turned his head to the left. Dr. John Irwin examined the patient and made a diagnosis of acute left labyrinthitis following middle ear infection. The pathology was limited to the ventricular portion of the labyrinth as there was no nerve deafness.

In the discussion which followed these two cases Dr. Holbrook mentioned four cases of myelitis or encephalitis which he had had following vaccination. There was a high mortality in these cases. Dr. Weil in discussing the case of labyrinthitis stated that in his opinion there was little to bear out the diagnosis, especially since there was no nerve deafness. He thought that if it was labyrinthitis it was more likely the toxic variety. Dr. Kearny mentioned some of the cases of labyrinthitis in his own experience. He thought the case was probably a serous labyrinthitis. He stated, however, that the absence of nerve deafness was certainly against the diagnosis.

Two interesting case reports were briefly summarized by the Chairman, and no discussion followed.

Willard R. Wirth, M. D.

VICKSBURG SANITARIUM STAFF MEETING.

The regular monthly meeting of the staff of the Vicksburg Sanitarium was held on November 10 at 6:30 P. M. After the business of the staff and a consideration of the reports from the records department and analysis of the work of the hospital, Dr. F. Michael Smith, Director, Warren County Health Department, made a report of vital statistics for the month of October.

Special case reports were presented as follows:

1. Endometriosis Associated with Dermoid Cyst.—Dr. J. A. K. Birchett, Jr.

Discussed by Dr. G. M. Street.

2. Nephritis.—Dr. L. J. Clark.

Discussed by Drs. G. M. Street, G. C. Jarratt, and L. S. Lippincott.

3. Squamous Cells Carcinoma of Base of Tongue.—Dr. E. H. Jones.

Discussed by Dr. J. A. K. Birchett, Jr. and G. M. Street.

Dr. G. M. Street reported on the recent meeting of the Interstate Post Graduate Assembly at Indianapolis and Dr. J. A. K. Birchett, Jr. reported on the recent meeting of the American College of Surgeons at St. Louis.

Selected radiographic studies were demonstrated as follows: Pulmonary tuberculosis (four cases); carcinoma of stomach; renal calculi (two cases).

The meeting closed with a lunch. The next meeting of the staff will be held on Monday, December 12.

Abstract—Endometriosis Associated with Dermoid Cyst.—Dr. J. A. K. Birchett, Jr.

Patient—Colored female, aged 33 years, housewife; married, no children, no miscarriages; admitted to hospital October 8, 1932.

Chief Complaint—Pain of dull character in right lower abdominal quadrant.

History of Present Complaint—For previous six months this pain had been present associated with pain across back and referred down back of legs. At menstruation the pain was very acute and the patient had to go to bed for the duration of the period, which was short. Flow was scanty and followed by profuse leukorrhea. For previous four months had noticed a mass developing in the lower abdomen.

Past History—No operations, no children, no serious illnesses, indigestion for past two or three years with gaseous distention and upper abdominal discomfort, relieved by taking soda. Was constipated and had had one or two attacks of hemorrhoids. Acute cold, mostly in the head, with some throat disturbance for previous two days. No cough, hemoptysis or chronic sore throat. No history of cardiac or circulatory disease, no palpitation, dyspnea or chest pain. Menstruation lasted usually two or three days, never longer. Began at 18 years. Had never missed a period; last period September 30 which was scant and accompanied by much pain.

Family History—Mother died at 45 years with nephritis; father died at 65 years with apoplexy; three brothers living and well; one sister living and well.

Physical Examination—Temperature 100° F., pulse 86, full; blood pressure 126/80; respiration 16, regular. Well developed and nourished; not acutely ill. Some tenderness over lower abdomen with indefinite mass above symphysis; firm, not hard, movable. Cervix had round os, was of soft texture, points downward and slightly outward; slight discharge, white. Uterus was difficult to outline because of large mass in cul-de-sac which extended upward to the anterior abdominal wall. This mass felt cystic with perhaps thickened walls, and was moveable. Tenderness more marked in right fornix. Uterus was apparently anterior to mass and slightly to the right. Few internal hemorrhoids. Physical examination otherwise not remarkable. Impression—Ovarian cyst; possible fibroids.

Clinical Laboratory—Blood: Hemoglobin 82 per cent; erythrocytes 4,290,000; color index 0.97; leukocytes 8,900; differential leukocyte count; small lymphocytes 34 per cent, large lymphocytes 17 per cent, monocytes 7 per cent, polymorphonuclear neutrophils, mature 24 per cent, immature 18 per cent. No malaria found. Wassermann, Kline and Young, and Kahn tests negative. Urine—Slight trace of albumin. Cervical smear:

Numerous pus cells; few gonococci; numerous other organisms.

Procedure—From the evidence brought out at examination, we were dealing with chronic inflammatory disease of the pelvis, possibly with fibroids, and a cystic condition in the ovary which suggested a dermoid. Operation was, therefore, advised. After a preliminary preoperative preparation of four days to clear up the slight coryza, operation was performed.

Under spinal anesthesia a low midline incision was made. The omentum was firmly adherent to the large cystic mass which filled the entire pelvis and which crowded the hypertrophied nodular uterus forward and upward under the symphysis; there were numerous subserous fibroids evident but of small size. Both tubes were cystic and were densely plastered to the peritoneum of the pelvis from which it was impossible to separate them. A partial removal of the tubes was done. The appendix was not molested. All raw surfaces were carefully peritonealized. It was noted during operation how densely adherent the adnexae were to the adjacent peritoneum of the pelvis which necessitated careful dissection because of the tendency to hemorrhagic oozing. There was not evidence of purulent inflammation in any of the cavities so generally noted in the usual cases of chronic pelvic inflammation. This patient had a rather stormy post-operative period, temperature rising as high as 102° F., with gastric dilatation and general toxic symptoms but with abdomen remaining free of usual signs of peritoneal irritation, i. e. tenderness, rigidity, distention or pain. There was a sero-sanguinous drainage from abdominal drain left in at operation for a longer period than is usual with the average case. We attribute the stormy post-operative period to the presence of endometriosis shown by pathological study. This, in our experience, gives us a patient more easily upset and more toxic than the case not complicated by this condition. Recently it was necessary to reopen a case of endometriosis on the seventh post-operative day to relieve a loop of strangulated, angulated ileum which had come in contact with endometrial tissue remaining in the pelvis following operation. An acute inflammatory disturbance involving the bowel had developed.

Pathological examination of tissues removed at operation showed endotrachelitis, chronic, cystic; fibro-leiomyoma of uterus; fibro-leiomyo-adenoma of uterus, multiple; endometritis chronic, hypertrophic; salpingitis, chronic, bilateral; endometriosis, both tubes, both broad ligaments, and both ovaries; calcareous degeneration, left tube and both ovaries; cystic right ovary; dermoid cyst of left ovary; oöphoritis, chronic, left.

Abstract—Acute Nephritis.—Dr. L. J. Clark.

Patient—White male, aged 66 years, widower; admitted to hospital September 16, 1932.

Chief Complaint—Weakness, headache, blood in urine, and swelling of feet and eyelids.

Onset about six months ago; began having fever, malaise, general weakness. After complete examination at this time nothing definite was found. His condition suggested a chronic malarial infection for which he was treated. However, he did not respond to this treatment very well and about two months ago he began passing bloody urine, having nocturnal headaches, slight swelling of ankles, and general weakness. There was no fever noted at that time. There was no dyspnea, no insomnia; headache worse at night but easily relieved by aspirin. He noticed that his kidneys acted more at night than in the day time, and that the blood in the urine became more noticeable. The swelling was much more evident. Appetite and digestion good. No nervous symptoms.

Past History—No outstanding illnesses of importance. Gall bladder removed three years ago. Aside from a few worries and financial disturbances his health had been excellent up until six months ago.

Physical Examination—Temperature 99° F., pulse 86, regular. Blood pressure 180/100. Respiration 18, regular. Well developed and poorly nourished, senile white man of possibly 66 years of age. Not uncomfortable, but apparently ill. There was considerable puffing of lower lids. The fundi show definite evidence of albuminuric retinitis and some thickening of blood vessels. Heart regular; sounds somewhat accentuated especially the aortic second sound; soft systolic murmur at apex. Few fine basal rales. Liver two fingers' breadth below costal margin, slightly hard but not nodular. No fluid or areas of tenderness or masses in abdomen. There was an upper right abdominal scar. Some slight soreness over kidney region. Marked edema of the legs and ankles. Physical examination otherwise not remarkable.

Clinical Pathology—Blood: September 16, leukocytes 9,700; small lymphocytes 16 per cent; large lymphocytes 6 per cent; monocytes 2 per cent; polymorpho—neutrophils, mature 56 per cent; immature 20 per cent; no malaria found. Blood Wassermann, Kline and Young, and Kahn tests negative. September 29, hemoglobin 6,768 grams per 100 cc. (40 per cent); erythrocytes 3,010,000; color index 0.66; leukocytes 5,500; small lymphocytes 30 per cent; large lymphocytes 3 per cent; monocytes 3 per cent; polymorphonuclear neutrophils, mature 42 per cent; immature 18 per cent; polymorphonuclear eosinophils, 2 per cent; polymorphonuclear basophils 2 per cent. October 29, hemoglobin 7.19

grams per 100 cc. (42.5 per cent); erythrocytes 3,400,000; color index 0.62; leukocytes 5,300; small lymphocytes 25 per cent; large lymphocytes 2 per cent; monocytes 6 per cent; polymorphonuclear neutrophils, mature 43 per cent immature 23 per cent; polymorphonuclear basophils, 1 per cent. October 1.—Urea nitrogen 30.36 milligrams per 100 cc.; creatinin 2.7 milligrams per 100 cc. October 4.—Plasma fibrin 0.338 per cent; plasma albumin 0.708 per cent; plasma globulin 2.2 per cent; total plasma proteins 7.246 per cent; blood chlorides 775.5 milligrams per 100 cc. October 13.—Urea nitrogen 21 milligrams per 100 cc.; blood chlorides 468 milligrams per 100 cc. Urine: September 16.—Acid, specific gravity 1.011; albumin eight per cent (by volume); hemoglobin three-plus; many finely granular casts; many fresh red blood cells. Urine showed from three to eight per cent albumin; finely and coarsely granular and few hyaline casts and many fresh red blood cells until October 14. On October 29, albumin was two per cent (by volume); there were numerous finely and coarsely granular and rare hyaline casts; and many fresh red blood cells. Repeated examination for tubercle bacilli were negative. The total output of urine at first average 1,500 cc. as compared to an intake of approximately 1,200 cc. Relief of edema probably accounted for the difference. The night urine averaged about 300 cc. more than the day urine. The specific gravity of the day urine averaged 1.022 and that of the night urine 1.010.

Cystoscopic examination on September 16, showed normal mucous membrane with no evidence of growth. Pyelograms of kidneys did not reveal any definite pathology. Phenolsulphonphthalein test, intravenous, 15 minutes, showed an output of 11 cc. of urine from the right kidney with dye 1.5 per cent; from the left kidney 10 cc. with dye 1 per cent. Specimens from both kidneys showed many fresh blood cells and few pus cells. No tubercle bacilli or other organisms could be demonstrated.

Summary—This case is a good example of a nephritic individual who does not need a diet restricted in proteins. As a matter of fact, he was allowed to eat his usual balanced diet. The salt intake was restricted and this, with the administration of magnesium sulphate, has produced marked relief in the edema, blood pressure, headache, and amount of blood in the urine. This patient is still under observation and I am glad to report he is very much improved including an increase of about two million in the red blood cell count after the use of iron and ammonium citrate.

Abstract—Carcinoma of Base of Tongue.—Dr. E. H. Jones.

Patient—White male, aged 49 years, fisherman, widower; seen October 26, 1932.

Complaint—Extremely painful sore throat of several months' duration.

Family History—Father died at approximately 30 years of age, some kind of fever, mother died at 60 years, insanity. Four sisters living and well. One maternal aunt died of tuberculosis. Patient saw her occasionally but never lived in the same house. Inasmuch as he was 13 years of age at the time of her death, this very probably had no influence upon him. Family history negative for malignancy, cardiac and renal disease.

Past History—Had been rather healthy all of his life. Had chicken pox and measles in childhood with no complications. Had mumps about eight years ago with no complications. Had influenza in 1918 with no complications. In the fall of 1918, while working as a switchman on a railroad, a steel billet fell off of a flat car and broke his left leg below the knee. It was while he was in the hospital with this fracture that he had influenza. The leg recovered without any disability, and he has had no other serious accidents. Contracted syphilis in 1917 and again in 1924; each time he was treated by a physician until a negative Wassermann was obtained and he was discharged as cured. In 1925 he had an operation by Dr. Podesta of this city for buboes, left. He denies having had gonorrhea, stating that no discharge was present at any time. No other operations.

He married in 1911 and lived with his wife until 1916; during that period she had no pregnancies. They were divorced.

Present Illness—The present illness started some six months ago. At that time he had a feeling of soreness in his throat. If he ate any foods that were acid or highly seasoned there was a burning sensation on swallowing. Being financially unable to consult a physician, he went to the Charity Hospital. A Wassermann was reported negative; nevertheless, he was given five injections of neosalvarsan with no improvement. His blood was positive for malaria and he received 16 "shots" of quinine intravenously. He also took more than one ounce of quinine by mouth. During this period of time he had not only no improvement of symptoms, but constantly grew worse. The staff at the Charity Hospital prescribed some gargle for him which he used and he used others, including peroxide and glycerin and potassium permanganate. Some two months ago for the first time he expectorated bloody sputum. At that time it came on only at intervals, though lately he has been spitting some blood every day. For three months he has been having to live on a soft and liquid diet almost entirely; however, there are intervals when his

throat improves sufficiently so that he is able to eat solid food. During this six months' period he has lost around 30 pounds in weight and feeling that something serious must be wrong, he came in for examination.

Personal Habits—Before the onset of this illness he drank 10 to 12 large cups of black coffee daily. Since his illness when he had been confined to his boat, he had been drinking not less than a half gallon of coffee daily and sometimes as much as one gallon. Before the onset of his illness he only smoked one ounce of tobacco daily and still smoked that amount. He used cigarettes which he made himself. He had not noted any exaggeration of symptoms following the use of tobacco and had continued smoking. Patient never drank tea or coca cola. He had been a heavy drinker of whisky all his life up until about two years ago. Since that time he had gone on periodical drunks lasting from one to two weeks with one to six months of total abstinence. Since his throat had been bothering him he had abstained entirely until the day before examination. At that time he was suffering so intensely that he took a few drinks hoping it would relieve the pain. Since the onset of this illness he has slept very poorly, stating that for a month at a time he did not sleep more than one hour a night.

Respiratory System—Patient stated that he was not susceptible to colds, that he never had the sensation of having one. He started smoking cigarettes at the age of 12 years and had had a hacking cough ever since that time. No hemoptysis until present illness.

Circulatory System—About two years ago he had had some trouble,—dizziness, etc., and consulted a physician who told him that he had two leaky valves in his heart and that it was missing an occasional beat. Had had occasional recurrences.

G. I. System—Appetite was simply enormous. No trouble with digestion. He had a tendency towards constipation and took medicine occasionally.

G. U. System—No nocturia, polyuria; dysuria or hematuria.

He had had all of his teeth extracted except four lower ones, the two lateral incisors and the two canine teeth. He had a bridge for the two central incisors. He did not wear a plate. He had the teeth removed because of pyorrhea.

Examination—The ears were negative to inspection. The nasal septum was one-plus deviated to the right. All membranes were congested but ventilation was fair. Transillumination negative. Oral hygiene fair. The four remaining teeth were suspicious. The tonsils were medium in size and showed a moderate degree of infection. The pharynx was quite congested

as is usually noted in heavy smokers. On indirect laryngoscopy an ulcerated area was noted at the base of the tongue just anterior to the epiglottis. On palpation there was found to be a small ulcerated cavity with fairly sharply defined borders but no marked induration noted. The ulcer was covered with a very foul smelling membrane and it was apparent that some food, etc., had collected in the cavity. The anterior cervical glands were definitely enlarged but not painful to palpation and did not seem particularly matted. A swab was taken for laboratory examination; a section of the ulcer was taken for biopsy. He was referred to Dr. L. J. Clark for a complete general examination. The patient was examined under the fluroscope. He was allowed to drink a light barium meal and the opaque fluid could be seen collecting in a cavity at the base of the tongue. There was no evidence of any structure of the esophagus. A roentgenogram was taken and it was estimated that the cavity was roughly one inch in depth by three-fourths inch in other diameters.

Dr. Clark reported the general physical examination entirely negative. He was unable to find any evidence of any metastases.

The laboratory report revealed the presence of a mixed infection including streptococci and Vincent's angina. The pathological report revealed a squamous cell carcinoma, grade III. The other reports were essentially negative. Due to the location of the area and the state of involvement, it was decided that radical surgery would be ineffective and, therefore, contra-indicated. Deep roentgen ray therapy was advised; eight treatments of thirty minutes each were advised.

Progress Notes—During the time of examination he had a very profuse hemorrhage. He stated that he lost some three quarts of blood, though this estimate was thought rather high. Euphagin tablets were given for relief of the pain of deglutition. Two roentgen ray treatments have already been administered. There has been no further hemorrhage and the patient reports that he feels very much better.

BILOXI HOSPITAL

The Staff of the Biloxi met in regular session Friday night, November 4. The hospital report for October was read and the interesting cases discussed.

There was a discussion of ways and means of collecting from the accident cases brought in. Among other things brought out was the fact that a verbal agreement to be responsible for the costs of medical attention was worthless in a large percentage of cases. In order to try to overcome this the secretary was instructed to

have cards made to be signed by the party accepting the responsibility.

During the month the old roentgen ray machine was replaced by the latest type of Westinghouse unit.

At the last meeting of the American College of Surgeons full membership in the organization was conferred upon Dr. G. F. Carroll. The Staff congratulated Dr. Carroll on his attainment. This is the second member of our staff to be so honored as Dr. G. W. Wallace was elected to membership last year.

Dr. P. E. Werlein returned Saturday, November 3, from Germany where he went to study along the lines of his specialty, eye, ear, nose and throat.

On November 1 we were visited by Dr. Felix J. Underwood. He is an ever welcome guest on the Gulf Coast.

E. A. Trudeau, Secretary.

MISSISSIPPI BAPTIST HOSPITAL STAFF, JACKSON

The regular meeting of the staff was held in the dining room of the hospital at 6:30 in the evening with 33 members and five visitors present.

The superintendent made a brief talk and then the minutes were read and adopted.

Dr. F. M. Armstrong presented a case report as follows:

W. F., aged 34 years, who was seen complaining of pain in lower abdomen of a very excruciating nature. Her previous health had been very good with the usual childhood diseases. She came from an asthmatic family and had had hay fever herself on a number of occasions. She was seen at 5 P. M. with this terrific pain in the whole lower abdomen. Menses were two weeks over due though there was some vaginal flow at the time, which had started that day. Pulse 100, respiration 30, temperature 101 F. She was given morphine, gr. $\frac{1}{4}$, which relieved her for about two or three hours somewhat, and then it became much worse. She was brought to the hospital where her leukocyte count was 21,000; polymorphnucleas neutrophils 65 per cent; and prepared for operation. On catheterizing her it was found that there was a trace of albumin and a red tinge to the urine. It was thought that the diagnosis was ruptured ectopic pregnancy, and this was concurred in by the consultant surgeon. Ether anesthesia was given which was poorly taken. Respiration was poor and resuscitants had to be resorted to. The laparotomy revealed a peritonitis with about three ounces of salmon colored fluid in the pelvis, which was purulent in nature

though the culture made from the same was negative for any growth. The tubes were filled with the same type of material. The right tube was the worst and was removed as well as the appendix, since it presented itself so easily. Three large rubber drains were put in and dressed. When the patient awakened the same excruciating pain was evidenced and morphine was given, but it was very unsatisfactory and hard to get any relief from the same. The patient became cyanotic and bluish grey in color. Hemoglobinuria resulted and large quantities of almost black urine were passed. Black, hemoglobin-like material came from the wound and abdomen on pressure at any time. The glands of the neck began to swell as though they were being pumped up and everything in the way of blood and infusions were resorted to, and yet the hemolysis continued. The patient died within 36 hours of the onset of the disease, her temperature having remained normal the whole time. The cause of the symptoms was undetermined.

The case was discussed by Drs. S. H. McLean and H. R. Shands, who had both seen the case, and they were also unable to express an opinion as to the cause of the disease. It seemed to look like a chemical poison of some kind.

Dr. Temple Ainsworth presented a case report as follows:

W. F., aged 15 years, came to the hospital because of symptoms of appendicitis, and was about to be operated upon for the same when the urine was found to show large quantities of albumin and hemoglobin. A cystoscopic examination was resorted to instead and it was found that the urine did not excrete any dye in twenty minutes. Blood urea and creatinine tests were done and found to be U. N. 60 mgs.; creatinine 5 mgs. Her output was only about one to two ounces in 24 hours. Her blood findings arose each day till at the end of a week urea nitrogen was 135 and creatinine 9 mgs., with a phenolsulphonphthalein output in two hours of 10 per cent. Blood transfusions and infusions of glucose in saline and diet were resorted to in the way of treatment. The patient left the hospital against advice on the fifteenth day with a creatinine of 2.0 and urea nitrogen of 60 mgs. She returned twelve days later with blood, pus and albumin in the urine and this time the pelvis of the kidney was washed with mercurochrome. In the meantime there had been a report obtained from another laboratory to which some of the blood had been sent of a positive malaria infection and quinine had been given per rectum. At the present time the urine output has increased to 30-40 ounces and the urine has cleared as well as the blood. Urea nitrogen is 40 mgs., and creatinine is 2.5 mgs.

This case was discussed by Dr. F. Hagaman. Dr. F. Hagaman reported a case as follows:

An infant had been circumcised, as was usual when the proper time had been selected, and the case was sent home. The patient has been dressed by the nurse at home with carbolated vaseline as was usual. In a week the parents called stating that the diapers were stained badly and were advised to send or collect a urine specimen. This was done and it was found that the urine was clear but that after it had stood for a while that it had become rather black looking. The three things that were found that would cause this were melanin, alcaptonuria, and phenol. It was assumed that the phenol was the cause. The urine cleared on the abstinence of the phenol.

Dr. Brister Ware was accepted as a member of the Staff of the hospital at this meeting and Dr.

Walton Shannon, D.D.S., was also elected to the staff in the same manner.

Drs. Wall, Hagaman and Batson were appointed as program committee for the December meeting.

Dr. Armstrong offered to show at some time in the near future, medical and surgical pictures. A discussion was entered into as to the showing of these at the regular staff meeting and a motion was made and passed to have these pictures in lieu of the regular meeting at the next time, which would be December.

Dr. Ainsworth reported a very interesting trip to the Cleveland Clinic where he witnessed some very interesting work with the resectoscope and saw some other interesting sights and work by Crile.

Lawrence W. Long, Secretary.

TRANSACTIONS OF ORLEANS PARISH MEDICAL SOCIETY

ORLEANS PARISH MEDICAL SOCIETY. CALENDAR.

DECEMBER 1—Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

DECEMBER 2—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

DECEMBER 2—Physiology Seminar, Tulane Medical School, 5 P. M.

DECEMBER 5—Eye, Ear, Nose and Throat Hospital Staff, 8 P. M.

DECEMBER 8—Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

DECEMBER 8—French Hospital Staff, 8 P. M.

DECEMBER 9—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

DECEMBER 9—Physiology Seminar, Tulane Medical School, 5 P. M.

DECEMBER 10—Election of Officers for 1933, Orleans Parish Medical Society. Balloting shall take place in the office of the Society, 1430 Tulane Avenue, between the hours of 10:00 A. M. and 12 Noon; 2:00 to 5:00 P. M.; and 7:00 to 8:30 P. M.

DECEMBER 12—ORLEANS PARISH MEDICAL SOCIETY, 8 P. M.

DECEMBER 14—Touro Infirmary Staff, 8 P. M.

DECEMBER 15—Clinico-Pathological Conference, Touro Infirmary, 10:30 A. M. to 11:30 A. M.

DECEMBER 15—Eye, Ear, Nose and Throat Club, 8 P. M.

DECEMBER 16—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

DECEMBER 16—I. C. R. R. Hospital Staff, 12 Noon.

DECEMBER 16—Physiology Seminar, Tulane Medical School, 5 P. M.

DECEMBER 16—Mercy Hospital Staff, 8 P. M.

DECEMBER 19—Stanford E. Chaillé Memorial Oration, Orleans Parish Medical Society, 8 P. M. Dr. Joseph Colt Bloodgood, of Baltimore, Orator.

DECEMBER 20—Charity Hospital, Medical Section.

DECEMBER 21—Charity Hospital, Surgical Section.

DECEMBER 22—Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

DECEMBER 23—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

DECEMBER 23—Physiology Seminar, Tulane Medical School, 5 P. M.

DECEMBER 27—Baptist Hospital Staff, 8 P. M.

During the month of November besides the regular meeting of the Board of Directors, the Society held one joint Clinical Meeting with the Charity Hospital Staff and one regular scientific meeting. At the Clinical Meeting interesting cases were presented and discussed by the members.

At the Scientific Meeting held November 28 the following program was presented:

"Painless Coronary Occlusion"

By:.....Dr. I. I. Lemann
Discussed by Dr. Ben Henniger and Dr. Randolph Lyons.

"Fractures of the Mandible and Their Treatment."

By:.....Dr. J. P. Wahl
Discussed by Dr. H. B. Gessner.

At this meeting Delegates and Alternates to the Louisiana State Medical Society were elected.

Nominations for officers for 1933 were handed into the Secretary at 9 P. M. Election of these officers will be held Saturday, December 10, between the hours of 10 A. M. and 12 Noon; 2 and 5 P. M.; and 7 and 8:30 P. M. in the office of the Society, 1430 Tulane Avenue. Only Active Members in good standing are eligible to vote.

On Monday, December 19, Dr. Joseph Colt Bloodgood, of Baltimore, will deliver the Stanford E. Chaillé Memorial Oration. Dr. Bloodgood wishes it emphasized that he is particularly anxious to have present at this lecture the dentists of the city and the trained nurses. His subject matter will be of particular interest to the three professional groups, medicine, dentistry and nursing, but it will also be a lecture which will be understood and comprehended by the laity.

While Dr. Bloodgood is in New Orleans plans are being made to have him give clinics and to show by lantern demonstration, his splendid collection of slides illustrating various phases of the cancer problem.

The Secretary's office has been unusually busy taking care of the activities of the various committees appointed to alleviate hospital abuse. The President appointed the following committees and they have been most active:

Committee on Federal Hospitals—Dr. Emmett Irwin, Chairman; Drs. H. W. E. Walther, G. C. Anderson, H. B. Gessner and P. G. Lacroix.

Committee on State Hospitals—Dr. A. E. Fossier, Chairman; Drs. Maurice Couret, John F. Dicks, E. D. Fenner, A. F. Hebert, J. G. Harz and Adolph Jacobs.

Committee on Compensation Abuse—Dr. E. A. Ficklen, Chairman; Drs. Emile Bloch, Isidore Cohn, E. L. Faust and W. D. Phillips.

Committee on Welfare Abuse—Dr. Arthur Caire, Jr., Chairman; Drs. P. C. DeVerges, E. L. Leckert, John Signorelli and P. L. Thibaut.

Committee on Industrial Insurance—Dr. Adolph Jacobs, Chairman; Drs. David Adiger, M. P. Boebinger, J. Geo. Dempsey and F. L. Loria.

Committee on Health Units in Parishes—Dr. Val H. Fuchs, Chairman; Drs. Chas. A. Bahn, S. M. Blackshear, T. F. Kirn and J. E. Landry.

Committee on Medical Schools—Dr. F. J. Chalaron, Chairman; Drs. H. B. Alsbrook, H. E. Bernadas, Louis Levy, and C. A. Willbillich.

Committee on School Boards and Their Welfare Organizations—Dr. Daniel N. Silverman, Chairman; Drs. Homer Dupuy, B. G. Elfron, J. E. Isaacson, Shirley C. Lyons and M. F. Meyer.

Committee on Boards of Health, State and City—Dr. Maurice Couret, Chairman; Drs. B. J. DeLaurel, L. A. Fortier, A. V. Friedrichs and F. M. Johns.

Committee on Abuse by the Profession—Dr. A. Mattes, Chairman; Drs. F. L. Fenno, W. P. Gardiner, E. H. Maurer and S. B. McNair.

Committee on Social Service Supervision for Hospitalization—Dr. P. Graffagnino, Chairman; Drs. J. E. Brierre, R. H. Fisher, J. B. Gooch and W. W. Leake.

Committee on Independent Ambulance Service—Dr. B. C. McLean, Chairman; Drs. C. G. Cole, J. F. Dicks, L. A. LeDoux, R. H. Potts and E. F. Salerno.

Committee on Private Hospital Abuse—Dr. Chas. Chassignac, Chairman; Drs. M. Earle Brown, Chaillé Jamison, J. H. Musser and W. A. Reed.

There seems at this time to be an opportunity to improve the condition of organized medicine in the city, but it is quite essential that each member of the Society lend his efforts to these several committees, and if he has anything whatever to report he is expected to communicate either with the Chairman of some member of a specific committee.

TREASURER'S REPORT.

ACTUAL BOOK BALANCE: 9/30/32:.....\$2,291.14
Credits 869.79

October expenditures \$3,160.93
..... \$2,807.45

ACTUAL BOOK BALANCE: 10/31/32:.....\$ 353.48

There have been 110 books added to the Library during October. Of these 50 were received by gift, 46 by binding, 13 from the New Orleans Medical and Surgical Journal and one by purchase. New titles of recent date are listed below.

The hours in the evening have been lengthened, the Library now being open from 7 to 11 P. M. on Monday through Friday. This will doubtless prove a convenience for doctors doing reference work in the Library at night.

Material has been collected on request on the following subjects during October:

Linitis plastica.
Pituitary therapy.
Uterine inertia.
Anatomy of the dog.
Sarcoma of prostate.
Unterberger's theory of sex determination.
Government analysis standards for water supply.
Life of Roger P. Ames.
Artificial impregnation.
Barbituric acid derivatives.
Electrocardiographic changes in hyperthyroidism.
Coagulability of plasma.
Blood cholesterin in disorders of the digestive tract.
Medical jurisprudence regarding gunshot wounds.
Blood platelets.
Antivirus therapy in empyema.

Acid-salicylate therapy.
Musical diastolic murmurs.
Anemia in nephritis.
Phlebitis.
Hypoglycemia.
Oil injections in treatment of sciatica.
Speech defects in children.
Treatment of stuttering.

NEW BOOKS

League of Nations—Malaria Commission Report. 1924.
Physiological Papers. 1926.
Lewis, G. N.—Valence. 1923.
Poole, Ernest—Nurses on horseback. 1932.
Fulton, J. F.—Sign of Babinski. 1932.
Boyd, William—Textbook of Pathology. 1932.
Mayer, Edgar—Curative value of light. 1932.
McConnell, J. W.—Nursing in Nervous Diseases. 1932.

Grollman, Arthur—Cardiac Output in Man in Health and Disease. 1932.)
Doll, E. A.—Mental Deficiency due to Birth Injuries. 1932.
Huddleson, J. H.—Accidents, Neuroses, Compensation. 1932.
Richards, E. L.—Behavior Aspects of Child Conduct. 1932.
Kohn, L. W.—Practical Treatise on Diseases of the Digestive System. 1932. 2 v.
Reed, Louis—Healing Cults. 1932.
Poe, J. G.—Modern General Anesthesia. 1932.
Bibliographic Survey of Vitamins, 1650-1930. 1932.
Hawaii Territorial Medical Association—Transactions. 1932.

H. Theodore Simon, M. D., Secretary.

MINORITY REPORT OF COMMITTEE ON MEDICAL CARE.—The objections to the Medical Center Plan are summarized as follows:

1. It would establish a medical hierarchy in every community to dictate who might practice medicine there.
2. It would be impossible to prevent competition among the many such centers necessary for large cities; cost would inevitably be increased by the organization necessary to assign patients to the various centers. This would add to the evils of medical dictatorship those of a new bureau in the local government with its attendant cost.
3. Continuous personal relationship of physician and patient would be difficult if not impossible under such conditions.

In the opinion of this minority group, the question of "Industrial Medical Service" has not been adequately or fairly dealt with in the majority report. For each of the favorable reports published (publications Nos. 5, 18 and 20) many instances could be cited wherein the results of industrial medical services have been exceedingly unfavorable. It is pointed out that in industrial medical services, mutual benefit associations, so-called health and hospital associations, and other forms of contract practice, no means have been found to prevent destructive competition between individuals or groups concerned with these movements. The studies published by the Committee show only the favorable aspect. They were selected because they were considered the most favorable examples of this type of practice in the United States. For each of these plans a score of the opposite kind can be found.

Utilization of subsidiary personnel is nothing new in medical practice. Already there is constant temptation in many fields to permit technicians to perform duties entirely unjustified by their knowledge and training. The minority expresses a word of caution relative to the dangers involved in permitting non-medical technicians to assume the duties which only physicians should undertake.

The Committee's first recommendation that medical service "should be furnished largely by organized groups of physicians, dentists" and so on is apparently predicated on the Committee's study of "Private Group Clinics." This minority group believes that the establishment of such clinics is in line of progress when they are a natural outgrowth of local conditions but the studies published by the Committee, in the opinion of the minority, were far too few in number to constitute a safe base on which to erect so large and revolutionary a structure as is proposed. The majority report fails to consider the fact that multiplication of clinics or groups in large communities results in duplication of expensive equipment far beyond the needs of the community. Such a multiplication of medical facilities, instead of reducing overhead and the costs of medical care to the community, adds to this cost through the duplication of plants. It is significant to note the overhead in private medical practice averages only about 2 per cent higher than for medical groups in the lower brackets of gross income. As the gross income rises, the ratio of overhead becomes progressively less significant.—Abstract from Journal of American Medical Association, December 3, 1932.

LOUISIANA STATE MEDICAL SOCIETY NEWS

IMPORTANT NOTICE

According to the By-Laws of the Louisiana State Medical Society, dues for the fiscal year of 1933 are now due. Secretaries of the various Parish Medical Societies should begin at once to collect the annual State dues of \$7.00 from its members for 1933, and remit as promptly as possible to the Secretary-Treasurer at 1430 Tulane Avenue, New Orleans. Any members from unorganized parishes are requested to send in their dues direct to the Secretary-Treasurer of the State Society.

In this regard we would like to call your attention to the fact that the protection under the Medical Defense of the State Society is only covered from the time that individual dues are received by the Secretary-Treasurer of the State Society. It is, therefore, urgent that these dues be remitted as promptly as possible in order that one may have full protection under our Medical Defense Act.

SECOND DISTRICT MEDICAL SOCIETY

The Second District Medical Society held its regular monthly meeting at the home of Dr. N. K. Edrington, Goodhope, Louisiana, on Thursday night, November 10, 1932. Dr. T. B. Sellers of New Orleans spoke on "Toxemias of Pregnancy." The paper was well received and was discussed by several members.

Following the meeting, the members and guests were entertained by Dr. Edrington at a delicious chicken barbecue.

The following guests from New Orleans attended the meeting: Dr. P. T. Talbot, Secretary-Treasurer of the Louisiana State Medical Society; Dr. Daniel N. Silverman, Councilor of the Second Congressional District; and Dr. Emmett L. Irwin. Dr. Roy B. Harrison, President of the Louisiana State Medical Society, was unfortunately unable to attend.

The next meeting of the Society will be held at the home of Dr. P. A. Donaldson at Reserve, La., on December 15, 1932.

EIGHTH DISTRICT MEDICAL SOCIETY

The Eighth District Medical Society at its meeting held in Alexandria, Wednesday, October 26, 1932, at the City Hall elected the following officers: President, Dr. M. H. Foster, Alexandria; First Vice-President, Dr. K. A. Roy, Mansura, Second Vice-President, Dr. H. M. Prothro, Pleasant Hill; Third Vice-President, Dr. A. J. Morat, Colfax; Delegate to the Louisiana State Medical Society, Dr. Jack Cappel, Alexandria;

and last and most important of all the very efficient Secretary-Treasurer, and Councilor of the Eighth District, Dr. J. H. Landrum, was reelected to the position he occupied last year.

SIXTH DISTRICT MEDICAL SOCIETY

At the meeting of the Sixth District Medical Society at Plaquemine, La., November 9, Dr. J. W. Lea of Jackson, La., presented a paper on the subject of "Pelvic Inflammatory Disease." Dr. Lea reviewed the literature giving an exhaustive discussion on the etiology, pathology, and treatment of this condition. Statistics of the incidence of the condition were given, individual cases were cited, and historical data mentioned.

Heat, as exemplified by diathermy, was insisted upon as the basis for modern treatment. Dr. C. R. Elliott was accredited with having discovered that the vagina would stand the high temperature of 130° to 135° F. without injury. Because seventy-five per cent of pelvic inflammatory diseases are caused by the gonococcus, and because of the fact that this organism is quickly killed by high temperature, the practicability of a method whereby heat might be applied to the vagina is obvious. Such a method has been devised by Dr. Elliott, who has made an apparatus consisting of a thin rubber bag inserted in the vagina and a high temperature maintained by continuous irrigation. Dr. Lea concluded his paper by giving particulars of the method of treatment devised by Dr. Elliott, and citing the excellent results obtained by this method. He stated, furthermore, that it is rather difficult to secure the Elliott apparatus and that he would be glad to inform those interested where it may be obtained.

FIFTH DISTRICT MEDICAL SOCIETY

There will be a regular meeting of the Fifth District Medical Society of Louisiana at the St. Francis Sanitarium, Monroe, La., Saturday, December 17, at 5 P. M.

Among the guest speakers will be Dr. John H. Musser, Professor of Medicine, Tulane University. He will speak on Syphilitic Heart Disease. Dr. Joseph Hume, former professor of Urology at Tulane University will speak on Prostatic Resection.

Dr. J. Q. Graves of Monroe will speak on Cancer and will show some of Dr. Bloodgood's moving pictures and slides. Dr. C. H. Hill of Monroe will discuss some practical points in anal neurology. Dr. M. T. Green of Ruston will also deliver

a paper. Please let this notice serve as a general invitation.

The date of this meeting has been changed from December 15 to 17, in order that the society might have the opportunity of hearing Dr. Joseph Colt Bloodgood of Baltimore who has been added to the list of speakers.

Frank P. Rizzo, M. D., Secretary.

EAST BATON ROUGE PARISH MEDICAL SOCIETY

The regular meeting was held in the Police Jury Room, December 2, 1932, at Baton Rouge. Dr. Francis LeJeune of New Orleans presented moving pictures of the "Larynx", and Dr. Emmett L. Irwin of New Orleans a paper on "Carcinoma of the Rectum".

W. H. Pipes, Secretary.
Rufus Jackson, President.

DR. MATAS HONORED

On November 11, at the "Armistice Banquet" of the French Veterans of the World War and the combined French societies of New Orleans, Dr. Rudolph Matas, Emeritus Professor of Surgery, Tulane University was presented with the title and insignia of Chevalier of the Legion of Honor conferred upon him by the government of the French Republic. The presentation was made by the Consul General of France, M. Rene Delage, who read the citation of merit in which the recipient was eulogized for his eminent services as a contributor to the progress of surgery and incidentally, as organizer and director of a medical school for the intensive training of officers of the Medical Reserve Corps established in New Orleans by order of Surgeon General Gorgas, during the World War (1917-1918), also as the organizer and Home Director of Tulane Unit, Base Hospital No. 24, which served with so much efficiency and distinction at Limoges.

The medical and surgical officers of this hospital unit were almost all teachers and alumni of the Medical School of Tulane University.

At the close of the banquet, which was attended by a large number of the most representative French citizens of New Orleans, the speech making ended with an address by Dr. Matas on "The Role of the French and French Speaking Physicians in the Medical History of Louisiana and on Their Basic Influence in the Intellectual and Cultural, as Well as the Medical Development of the State."

The address was delivered in French to a non-medical audience, in popular and non-technical terms, but it reflects so much credit upon the medical profession of Louisiana, that we hope for its early publication so that we may abstract and translate some of its leading paragraphs for the benefit of our readers.

In connection with this latest distinction conferred upon our distinguished and beloved confrere and at one time Editor, the Journal is pleased to learn that in addition to the long list of titles and honors that have been so justly showered, at home and abroad, on Dr. Matas, he has recently received the diplomas of honorary fellowship in the National Society of Polish Surgeons, at Warsaw, and of the Medical Society of Copenhagen, Denmark.

NEWS ITEM.

Members of the faculty of the Graduate School of Medicine of The Tulane University of Louisiana attending the meeting of the Southern Medical Association in Birmingham, Ala., were Dr. H. Daspit, who presented a paper on "Mental Hygiene of the Involution Period", Dr. Elizabeth Bass, Dr. Sidney K. Simon, Dr. Walter E. Levy, Dr. R. E. de la Houssaye, Dr. W. A. Wagner and Dr. T. B. Sellers.

Dr. P. T. Talbot, of the faculty of the Graduate School of Medicine of The Tulane University of Louisiana, has recently returned from a month's vacation spent in the west.

Dr. H. B. Alsobrook, of the same faculty, attended the meeting of the American College of Surgeons held at St. Louis, Mo., October 17-21, 1932.

Dr. P. L. Querens attended the meeting of the American Public Health Association at Washington, D. C., October 24-27, 1932.

At a recent meeting in Chicago, the directors of Alpha Omega Alpha Honorary Medical Scholarship Society adopted the following resolutions in recognition of the eminent services of the late Dr. William W. Root, Slaterville Springs, New York, the founder of the society and secretary-treasurer since its organization in 1902:

1. That all stationery and official documents of the society bear the words, "Founded by William W. Root, 1902," and

2. That the annual lecture presented each year by a leading medical scientist, be known as the William W. Root Alpha Omega Alpha Lecture.

The present officers of the society are Walter L. Bierring, Des Moines, president; Austin A. Hayden, Chicago, vice-president; Josiah J. Moore, 55 East Washington Street, Chicago, secretary-treasurer. Mrs. Root will continue as assistant secretary.

In addition to the officers, the directorate includes Ray Lyman Wilbur, Washington, D. C., Waller S. Leathers, Nashville, Louis B. Wilson, Rochester, Minn., and Willard C. Rappleye, New York City.

The College of Physicians of Philadelphia announces that the next award of the Alvarenga Prize, being the income for one year of the bequest of the late Senor Alvarenga, and amounting to about Three Hundred Dollars, will be made on July 14, 1933, provided that an essay deemed by the Committee of Award to be worthy of the Prize shall have been offered.

John H. Girvin, Secretary,
19 South 22d Street, Philadelphia, Pa., U. S. A.

HEALTH OF NEW ORLEANS.

The Department of Commerce, Division of Vital Statistics, has issued the following weekly reports concerning the health of New Orleans. For the week ending October 15, there were reported a total of 135 deaths in the City, 91 in the white and 44 in the colored population, giving a death rate of 14.9 for both races, 14.1 for the former and 16.7 for the latter. For the week ending October 22, the death rate had fallen to 13.7, the white rate being 11.2 and the colored 19.8, with a total of 124 deaths, divided 72 white and 52 colored. The infant mortality rate this week was 51. The death rate for the next week was slightly higher, as there were 128 deaths in the City, divided 81 white, and 47 colored, with a total rate of 14.1, 12.6 for the white and 17.9 for the Negro race. The infant mortality rate was 57, divided almost equally between the two races. A large number of deaths occurred among the colored population during the week which ended November 5. There were 73 deaths, giving a rate of 27.8, as contrasted with a rate of 12.6 among the white population. There were 154 deaths with a rate of 17.0 for the combined population. For the next week, that ending November 12, the death rate was considerably lower, there being only 136 deaths with a death rate of 14.9, distributed white 83, rate 12.9, colored 52, rate 19.8. The infant mortality rate was considerably elevated, being 114 and accounting for some of the increase in the total for the entire population.

INFECTIOUS DISEASES IN LOUISIANA

Dr. J. A. O'Hara, President of the Louisiana State Board of Health, in collaboration with the Treasury Department of the United States Public Health Service, has issued morbidity weekly reports, which briefly abstracted contain the following information. For the forty-second week of the year, ending October 22, syphilis was reported in 72 instances, while 24 cases of gonorrhea were likewise listed. The other reportable diseases in numbers over ten were: thirty-one cases of pulmonary tuberculosis, 31 of diphtheria, 29 of pneumonia, 28 of malaria, 26 of cancer, 20 of scarlet fever, and 13 of typhoid. Of the rarer diseases, one case of typhus fever was re-

ported and one of encephalitis. The forty-third week of the year, ending October 29, gave the following information concerning reportable diseases: Forty-six cases of syphilis, 35 of cancer, 33 of pneumonia, 27 of tuberculosis, 24 of malaria, 29 of diphtheria, 22 of gonorrhea, 18 of scarlet fever, 17 of influenza, and 10 of septicemia. There were reported also 2 cases of meningitis, 2 of typhus fever, and one of smallpox. For the next week ending November 5, there was a considerable increase in the number of cases of syphilis and of cancer, there being 86 cases of the former and 52 of the latter reported. Pneumonia had also increased, 49 cases being listed, as contrasted with the five-year average of 58. Other diseases that occurred in double figures were: Thirty-eight cases of diphtheria, 36 of tuberculosis, 26 of scarlet fever, 22 of malaria, 19 of gonorrhea, and 10 of trachoma. This is the first time that trachoma has been on the list of reportable diseases for a long time. One speculates as to where these cases arose. In this same week there were also reported 3 cases of undulant fever, and one of typhus. For the forty-fifth week of the year, ending November 12, there was considerable reduction in the diseases all along the line. Pneumonia had dropped to 26 cases and syphilis to only 14. Cancer had fallen to 31 cases and diphtheria to 29. Other diseases in double figures include: Twenty-one cases of gonorrhea, 26 of malaria, 16 of influenza, 11 of hookworm, and 15 of scarlet fever. One case of poliomyelitis was reported and 2 of undulant fever. The diphtheria cases were reported from various places throughout the State, Orleans Parish naturally leading. For the last week for which the figures are available, the week ending November 19, the forty-sixth week of the year, there was a more or less persistent continuation of the low figures of the previous week. There were reported 35 cases of diphtheria, 34 of gonorrhea, 25 of tuberculosis, 24 each of scarlet fever and syphilis, 22 of cancer, 18 of pneumonia, and 11 of chickenpox. Of the unusual diseases one case of leprosy was reported, and one of smallpox.

A NEW CANCER BOOKLET FOR THE LAYMAN

The New York City Cancer Committee has just issued a pamphlet entitled "Cancer Then and Now." The Committee feels that this is a most effective method of bringing before the lay individual what has been done and what has been accomplished at the present time in the way of cancer control. Copies of this book can be purchased for a small sum from the New York Cancer Committee, 34 East 75th Street, New York.

The booklet is arranged so that on each right hand page there are reproductions of sections of

the exhibit which was first shown at the Clinical Congress of the American College of Surgeons in New York last year. On the left page there is a brief discussion by well known surgeons, radiologists, and cancer students explaining the meaning of the illustrations that face the written material. In this way practically every phase of the cancer problem is discussed, and the subject is presented so that any one who reads it, even though not familiar with medicine, is enabled to understand all the various things that have to do with cancer from its control to methods of study in the research field.

WOMAN'S AUXILIARY NEWS

To step aside from the regular State news for a bit, let me say that the meeting of the Southern Medical Association at Birmingham was a large success, although rather small in attendance as compared to our more prosperous years in the past.

With the warm hospitality so universal throughout our Southland, the doctors wives of Jefferson County welcomed the visiting ladies and looked after their every comfort and pleasure during the three days they were guests.

It is too bad that more of our Louisiana members were not present when Mrs. A. A. Herold, of Shreveport, took over the gavel and became President of the Women's Auxiliary to the Southern Medical Association. In accepting this honor, Mrs. Herold, in her usual gracious manner, made a splendid address which resounded with the gentleness and dignity so well known by us as some of her many qualifications.

Louisiana's annual report which was written by our State President, Mrs. Robert T. Lucas, of Shreveport, was read by Mrs. S. Chaille Jamison of New Orleans, owing to the president's inability to be present. In outlining the good work done by the seven Louisiana Auxiliaries, Mrs. Lucas brought out the high-points emphasized by each of them and her report was quite up to par as compared with the others read. We seem to be doing our mite in carrying on, "as an auxiliary" whatever work our doctor husbands think wise and safe that we sponsor.

Those of Louisiana who attended the Convention were:

Orleans: Mrs. Homer Dupuy, Mrs. S. Chaille Jamison, Mrs. Sidney K. Simon, Mrs. H. W. E. Walther, Mrs. Wm. Burton Clark, Mrs. Charles F. Craig, Mrs. H. N. Old, and Mrs. Wiley R. Buffington.

Caddo: Mrs. A. A. Herold.

Rapides: Mrs. D. C. McBride.

East Baton Rouge: Mrs. Wm. Kernan Irwin.

Again, I appeal to the Auxiliaries throughout the State to send in whatever they have of interest that it may be passed on to others through this Journal.

Orleans Parish Auxiliary met the second Wednesday of this month at the Orleans Club with an attendance of about 150 members. A splendid address was given by Dr. Basil McLean, Supt. of Touro Infirmary, the title being "What Price Hospital Care." Miss Caroline Blum, accompanied by Mrs. Henry Laurens, sang very charmingly. The members pledged themselves to help the local Red Cross Society to the extent of sewing in their work room until fifty garments have been completed, by the Auxiliary. The material used being part of the vast amount donated by the Government for this worthy work being done by the Red Cross.

Mrs. W. R. Buffington,
Chairman Press and Publicity, W. A. to
the La. State Med. Soc.

DEATHS

MEMORIAL ON THE DEATH OF DOCTOR PAUL J. JELPI

AN HONORED MEMBER OF THE VISITING STAFF OF CHARITY HOSPITAL, NEW ORLEANS

During the year there passed to his reward in immortality Dr. Paul J. Gelpi, for many years an active member of the Visiting Staff of Charity Hospital, New Orleans. Thousands of patients had received relief and cure at his hands, comfort from his charming personality. Numerous students profited from the instruction imparted by him. The Visiting Staff organization had been stimulated by his enthusiasm and advanced by his executive ability, fully demonstrated in the office of President. We who shared with him his warm affection for our clinical Alma Mater feel deeply the loss of this comrade. We take this occasion to testify to his able services, his personal worth, and to convey to his bereaved family our cordial sympathy.

Albert E. Fossier, M. D.

Hermann B. Gessner, M. D.

R. L. Gordon, M. D.

Committee

Pray, Alfred Arnold, New Orleans: Born in 1865. Graduated from Tulane University in 1897. He was a member of the American Medical Association, Louisiana State Medical Society, and Orleans Parish Medical Society. Dr. Pray died in New Orleans on November 7, 1932.

MISSISSIPPI STATE MEDICAL ASSOCIATION NEWS

L. S. Lippincott, Editor

Jacob S. Ullman, Associate Editor

D. W. Jones, Associate Editor

THAT WE MAY KNOW EACH OTHER BETTER.

Dr. Robert B. Cunningham was born in Booneville, Mississippi, December 14, 1896. He received his preliminary education in the Booneville High School; attended Mississippi State College; received the degree of B. S. at the University of Mississippi in 1924; and the degree of M. D. at Tulane University in 1926. Dr. Cunningham spent two years in the Naval Medical Corps during the World War. He has been connected with the Sutherland Clinic of Booneville since 1926.

A HAPPY CHRISTMAS

This is the month of Christmas when we wish everyone happiness. Perhaps we think of others a bit more in this holiday season than at other times of the year. A great profession so often extolled for its good deeds to others without thought of reward, might well at this time particularly consider how much of the praise bestowed is really deserved. Sometimes, we may become a little selfish or lax. Sometimes we may not always really give our best efforts when we know in advance that there is no chance of monetary reward.

Have we done for our patients in the last year as much or as well as our abilities demanded? Have we thought of the effect of diagnoses made hurriedly without careful examination? Have we remembered that when we reported a case of malaria or bacillary dysentery without knowing that the causative organism was present, that

report added to many others went out over the country branding Mississippi as a hot bed of these diseases. Have we helped to place Mississippi in an unenviable position as regards the incidence of pellagra because we thought some eruption on the skin of an indigent patient could as well be pellagra as something else. Have we treated along for months an ulcer that would not heal without determining by biopsy the nature of the process? Through years of intensive education the public has been taught to go to the doctor early in conditions where cancer might exist. It is only through early treatment that in our present knowledge we can hope for cure. How often are such early lesions treated for months until metastases have occurred or the fearful patient told that nothing serious exists, until no treatment will avail.

Have we kept up with the many advances in diagnosis and treatment and applied them to our patients?

Or have we taken the attitude that we know our own business and do not need the new "frills?"

Have we remembered that people in general are coming more and more to demand to know about disease; that they compare our methods of diagnosis and treatment with those applied by other doctors, perhaps much younger in age and experience, and have a way of picking the other fellow when we do not meet the measure. Have we at times become discouraged and perhaps dis-



ROBERT B. CUNNINGHAM, M. D.
Vice-President Mississippi State Medical
Association
Booneville, Mississippi

gruntled, and then to excuse our own failure to keep up, branded the other fellow who is getting our patients as unethical?

Are we proving as we must do that better medical care is being furnished now under our system of private practice than would be possible under a scheme of so-called "state medicine?"

In short, are we exerting the effort, and it is a real effort, to live up to the ancient ideals of a great profession in a time of fast change?

If we can answer in the affirmative and be honest with ourselves and fair to the other fellow, medicine in Mississippi has nothing to fear.

A HAPPY HOLIDAY SEASON TO YOU AND YOURS.

MISSISSIPPI STATE HOSPITAL ASSOCIATION

The following letter has been sent to each non-member hospital of the state. Dr. J. Gould Gardner, Columbia, president of the Mississippi State Hospital Association, has devoted much time and interest to the hospitals of our state this year and it is to be hoped that he will be successful in enlisting the support of every institution devoted to the care of the sick.

"On each highway entering Reno, Nevada, there is a sign which reads: 'Reno Is The Biggest Little City In The World.' This gave me the thought that the Mississippi State Hospital Association, while both young and small, is the most active organization in Mississippi. The reason for this is because there is so much to be done. More of our community hospitals should be standardized, some need repairs and equipment. To be able to do these and many other things, so as to be able to grow and develop and keep up with the rapidly advancing civilization, our community hospitals must be compensated by the State for the actual cost of charity patients.

"There is an urgent need for new laws to give our hospitals the legal protection they are entitled to, and last but not least, our present deplorable state charity hospital system should be changed. They should be converted into community hospitals and the state's indigent cases should be cared for in the community in which they live by the community hospital, with state appropriations.

"Your president has addressed four local medical societies recently, explaining the crying need and advantages of these changes. If I have not talked to your local medical society, I hope to have this opportunity soon, in order to explain to the doctors the evils of our present system, and the benefits that could be derived by the charity patients, the doctors and community hospitals.

"Cooperating with the legislative committee of the State Medical Association, we will try to have

the necessary laws passed at the next session of the Legislature. To do these things we need the cooperation of every community hospital in the state. We not only need your membership in our organization but we need your energetic help and influence with the people of your community, especially your senator and representatives.

"If you have not already joined this year, won't you join now? Send your membership fee to Dr. Leon S. Lippincott, Secretary, Vicksburg, Mississippi. We need you and we want you with us, to help put through the finest thing yet attempted for the worthy poor, the doctors and the community hospitals of Mississippi.

"Get in line, and keep in step with our forward march, by helping us to help you.

"Sincerely,

"J. Gould Gardner, M. D."

MONTGOMERY COUNTY.

Practically all the doctors of Montgomery County attended the series of lectures on obstetrics given in Kosciusko, by Dr. McCord of Atlanta, Ga., and claimed to be very much benefitted by same.

The Winona District Medical Society held its last meeting in Grenada, Wednesday, November 9, with the following program:

1. Present Trends in Public Health.—Dr. Felix J. Underwood.
2. Prophylactic Serums and Vaccines.—Dr. C. J. Vaughn.
3. Cervical Obstructions.—Dr. W. F. Hand.

Dr. S. S. Caruthers, Duck Hill, was elected president, and Dr. E. W. Holmes, Winona, secretary and treasurer.

The doctors in our county are not doing much and are not collecting but very little.

Hoping to have more news next time.

J. O. Ringold, County Editor.

Winona, November 10, 1932.

ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY

Tuesday, December 13, 6 p. m., Y. M. C. A.

Vicksburg

Some Reflections Upon Peripheral Vascular Disease.—Dr. I. I. Lemann, New Orleans.

Demonstration of the Indispensable Use of the Roentgen Ray in the Diagnosis of Some Obscure Clinical and Surgical Diseases.—Dr. Amedee Granger, New Orleans.

Kidney Complications of Gall Bladder Disease.—Dr. Willard Bartlett, Jr., St. Louis.

Every member of the Mississippi State Medical Association and the Louisiana State Medical Society is cordially invited and urged to come early in order to see Vicksburg, visit the local hospitals, the National Military Park, the Government Hy-

draulic Laboratory or to play golf on one of the finest courses in the WORLD. Banquet at six o'clock.

Dr. J. M. Acker, Jr., President of the Mississippi State Medical Association, will make an official visit.

EIGHTH COUNCILOR'S DISTRICT MEDICAL MEETING, McCOMB, OCTOBER 11, 1932

The Eighth Councilor's District Medical meeting was held as outlined in the program, with the exception of two of the eight speakers scheduled. Dr. J. M. Acker, Jr., President of the Mississippi State Medical Association, wired his regrets stating that he was unavoidably detained. Dr. J. W. D. Dicks, President-Elect, also submitted his regrets stating that it was impossible for him to be present. Both were due to illness.

At 12:30 noon, 94 members and guests assembled in the sub-story reception rooms of the Centenary Methodist Church. After the invocation by Rev. B. M. Hunt, pastor of the Centenary Methodist Church, a most delicious dinner was served by the ladies of the Centenary Church Missionary Society. During this dinner, a most pleasant welcome address was given in behalf of the City of McComb by Mr. J. O. Emmerich, editor of the McComb Enterprise. A very timely response to Mr. Emmerich's address was made in behalf of the society by Dr. L. S. Gaudet of Natchez.

After dinner the meeting was called to order by the chairman, Dr. W. H. Frizell, Councilor of the Eighth District. Dr. Frizell first introduced the guests, including Dr. D. W. Jones, Jackson; Dr. Felix J. Underwood, state health officer, Jackson; Dr. H. C. Ricks, director of the Bureau of County Health Work, State Board of Health, Jackson; Dr. H. F. Garrison, pediatricist, Jackson; Dr. D. J. Williams, health officer of Harrison County, Gulfport; Dr. C. C. Thompson, Columbia.

The scientific program was then carried out as follows:

1. Aspiration Treatment of Empyema in Children, Dr. R. A. Strong, Professor of Pediatrics, Tulane University.
2. The Management of Thyroid Disease, Dr. J. H. Musser, Professor of Medicine, Tulane University.
3. Some Interesting Cases of Allergy, illustrated, Dr. N. F. Thiberge, New Orleans, La.
4. Hoarseness, with moving picture demonstrations, Dr. F. E. LeJeune, Associate Professor of Oto-Laryngology, Tulane University, Graduate School of Medicine.
5. The Diagnosis and Localization of Brain Tumors, Dr. G. C. Anderson, Professor of Neurosurgery, Tulane University.

Without an exception each man presented his subject in a most entertaining, practical and

scientific manner. The type of scientific program presented might be best described in a statement made by one of the physicians after the conclusion of the program which was that this program was not excelled by any section of either the State or American Association meetings held this year. The program was enjoyed and most gratefully received by every member and guest present. Opportunity is hereby taken to again express the appreciation of the Councilors' District to these men for the splendid service they rendered to us in presenting such a beneficial practical program.

After the scientific program, D. J. Gould Gardner, President of the Mississippi State Hospital Association, presented in a most enlightening manner the conditions existing in private and charity hospitals in Mississippi. Discussing charity hospitals, Dr. Gardner stated that until recently none in Mississippi were listed in the American Society of Hospitals. Dr. Gardner pointed out in detail the cost to the taxpayers of Mississippi of these charity hospitals and definitely presented facts to show that although the state at large was bearing this expense only a very limited cross section in the south central portion of the state was receiving by far a greater percentage of the services of these hospitals. He showed in one instance where as high as 56.5 per cent of the total appropriation for one hospital was used for patients from the county in which the hospital is located. Dr. Gardner made a plea to the effect that every effort be made to present to taxpayers all over Mississippi the true picture concerning the charity hospitals. He stated that our only hope to correct this is through the taxpayers influencing legislators to such an extent that correction of this great misplacement of money will be made. This correction, Dr. Gardner stated, can be made by providing money for use by every hospital in the state for the indigent sick in the immediate vicinity of each hospital. After Dr. Gardner's address, a motion was made that Dr. Gardner prepare a summary of the facts presented to this meeting for publication and that he present this to the secretary, and the secretary be instructed to pass this on to the Publishing Committee and Committee on Ethics of the State Medical Association and have this published in the "New Orleans Journal," and also in local newspapers throughout the state.

Following Dr. Gardner's address, Dr. Underwood was called upon by the chairman for a statement of anything he might care to say. Dr. Underwood endorsed most heartily the address made by Dr. Gardner and emphasized the fact that in recent years it appeared that legislators, and other appropriating bodies, had waited until the last to make provision for hospitals and health and had given "what was left" for this great work. He stated that this must be an outgrowth

of the practice of individuals to give, after all other bills have been paid, what is left to the doctor for his service in saving their lives during the time when the individual was unable to do anything for himself. Dr. Underwood stated that as a result of this practice on the part of the legislators the State Board of Health was no longer able to furnish free of charge neosphenamine, rabies vaccine, the weekly health letter and many other valuable services rendered by the State Board of Health.

After Dr. Underwood's statement, the meeting was adjourned. The following members were present:

Dr. Thos. B. Abney, McComb; Dr. O. N. Arrington, Brookhaven; Dr. W. H. Aikman, Natchez; Dr. J. E. Brumfield, Magnolia; Dr. L. W. Brock, McComb; Dr. D. T. Brock, McComb; Dr. H. L. Bauer, McComb; Dr. J. T., Butler, Brookhaven; Dr. W. O. Biggs, Osyka; Dr. Robt. H. Brumfield, McComb; Dr. F. E. Collins, Brookhaven; Dr. T. F. Coon, Monticello; Dr. C. E. Catchings, Woodville; Dr. W. F. Cotton, McComb; Dr. H. R. Fairfax, Brookhaven; Dr. S. E. Field, Centreville; Dr. A. J. Fortenberry, McComb; Dr. W. H. Frizell, Brookhaven; Dr. L. S. Gaudet, Natchez; Dr. E. M. Givens, McComb; Dr. B. J. Hewitt, McComb; Dr. A. B. Harvey, Tylertown; Dr. W. C. Hart, McComb; Dr. T. E. Hewitt, Summit; Dr. Paul Jackson, Liberty; Dr. S. Paul Klotz, McComb; Dr. G. L. Kaiser, Natchez; Dr. W. L. Little, Wesson; Dr. W. H. H. Lewis, Fayette; Dr. W. R. May, Brookhaven; Dr. Thomas Purser, McComb; Dr. Elise Rutledge, McComb; Dr. Gladys Ratcliff, McComb; Dr. M. D. Ratcliff, McComb; Dr. L. J. Rutledge, McComb; Dr. G. W. Robertson, Magnolia; Dr. C. W. Stewart, Osyka; Dr. R. S. Savage, Brookhaven; Dr. C. L. Simons, Hazlehurst; Dr. R. E. Silverstein, Tylertown; Dr. L. W. Walker, Auburn; Dr. T. Paul Haney, Jr., McComb; and Dr. G. T. Warren, Brookhaven.

Under the direction of Mrs. L. S. Gaudet, the Pike County Medical Society Auxiliary was organized. The following officers were elected: President, Mrs. Thos. B. Abney; Vice-President, Mrs. Thos. Purser; Secretary-Treasurer, Mrs. W. F. Cotten; Paliamentarian, Mrs. J. M. Smith; Historian, Mrs. J. S. Moore.

T. Paul Haney, Jr.,
Secretary.

W. H. Frizell,
Councilor, Eighth Councilor District.

McComb, October 30, 1932.

EAST MISSISSIPPI MEDICAL SOCIETY.

Many visiting physicians and ladies attended the meeting of the East Mississippi Medical Society which was held in the Lamar Hotel, at Meridian, on the afternoon of October 20. Among these were Drs. R. H. Clark, H. L. McKinnon,

B. D. Blackwelder, Hattiesburg; Dr. and Mrs. Willis Walley, of the State Charity Hospital, Jackson; Drs. F. J. Underwood and H. C. Ricks, of the State Board of Health, Jackson; Dr. and Mrs. J. S. Hickman of the Mississippi State Insane Hospital, Jackson; Dr. N. C. Womack, Jackson; Drs. Edward C. Mitchett and John J. Shea, Memphis, Tenn.; Drs. G. C. Jarratt, Vicksburg; V. M. Creekmore, W. A. Land, DeKalb; F. C. Spalding, West Point; T. C. Alford, F. H. Miller, Mashulaville; S. M. Murphy, Macon, and Mrs. M. L. Montgomery, Louisville.

The program rendered was as follows:

Eczema and Some of Its Phases.—Dr. R. M. Leigh, Meridian.

Discussed by Drs. E. L. Richardson and H. S. Gully.

Present Trend of Public Health.—Dr. F. J. Underwood, Jackson.

Discussed by Drs. W. W. Reynolds and M. L. Montgomery.

Appendicitis.—Dr. M. L. Montgomery, Louisville.

Discussed by Drs. Willis Walley, R. G. Hand, and W. J. Coleman.

Fifteen Years' Experience with Sinus Infection in Children.—Dr. Edward Clay Mitchel, Professor of Pediatrics, University of Tennessee School of Medicine, and Dr. John J. Shea, Nose and Throat Specialist, Memphis, Tenn.

Drs. A. L. Monroe, E. L. Richardson, M. J. L. Hoyer and E. C. Mitchell were named as a committee to examine a little girl who developed psychical trouble sometime after receiving an injury to her head. Dr. Monroe discussed the case before the society.

Immediately following the business session, Drs. F. G. Riley and W. J. Coleman of Riley's Hospital and Clinic were hosts at a dinner at the hotel. The decorations were unusually attractive, Dr. J. S. Hickman served as toastmaster and those participating on the program were Drs. E. C. Mitchell, J. J. Shea, Willis Walley, F. J. Underwood, A. L. Monroe, H. L. McKinnon, Dudley Stennis, D. V. Galloway, Mrs. J. S. Hickman, Drs. F. G. Riley and W. J. Coleman.

Officers for the year 1933 will be elected at our next meeting which is to be held in the Lamar Hotel, Meridian, Thursday afternoon, December 15. The program for this meeting has not yet been arranged.

T. L. Bennett, Secretary.

Meridian, November 11, 1932.

DELTA MEDICAL SOCIETY.

A meeting of the Delta Medical Society was held at Greenwood on October 12 and was called to order at 2:00 o'clock p. m., by the President, Dr. George Baskervill. Invocation was said by

Rev. E. J. Caswell. Mrs. W. C. Pool, Cary, President of the Women's Auxiliary to the Mississippi State Medical Association, and Mrs. W. R. Brooksher, Fort Smith, Ark., Vice-President of the Women's Auxiliary to the American Medical Association, were present, along with several of the doctors' wives. Both Mrs. Pool and Mrs. Brooksher made short talks before the Society, discussing the organization of an Auxiliary to the Delta Society.

The minutes of the previous meeting held at Merigold, October, 1931, were read and stood approved as read.

A motion was introduced by Dr. L. B. Otken, of Greenwood, that the following resolution be discussed and passed by the Society. The resolution was read as a whole, and then each section of the resolution was again read and passed upon separately by the Society as a whole:

"We, the members of the Delta Medical Society, desire to go on record as favoring the following:

"1. Passage of the Basic Science Law.

"2. The curtailment of the activities of the State Board of Health, so far as the giving of serums, toxins, etc., is concerned, except to absolute indigent cases. Specifying that tenants on farms and plantations shall not be so classed.

"3. The abolition of the privilege tax on physicians, including Sales Income Tax, also taxes on their working equipment. We feel that these taxes are unjust in view of the amount of charity work that we are called upon for and that we gladly do.

"4. A full and complete discussion of this matter before the House of Delegates at the next meeting of the Mississippi State Medical Association."

All four resolutions passed. Some of them were not passed unanimously. There was considerable discussion on each and every section of the resolution.

The scientific program was then taken up, and a paper on "Serous Meningitis" was read by Dr. Robert Jackson, of Belzoni. Discussion was opened by Dr. J. W. Jackson, of Belzoni, and the paper was further discussed by Dr. Barnes, of Belzoni.

A paper, "The Typhoid Carrier," was read by Dr. N. C. Knight, of Indianola, and was discussed by Drs. Barnett and Wasson.

A paper, "Chronic Otitis Media," was given by Dr. J. P. Wiggins, of Cleveland, and discussed by Dr. Montgomery.

A paper, "Modern Resources of Radiology in Urologic Diagnosis," was given by Dr. J. A. Beals, of Greenville, and discussed by Dr. C. P. Thompson, of Greenville.

A paper, "Osteomyelitis," was given by Dr. F. M. Sandifer, of Greenwood, and discussed by Drs. Otken, Nobles and Colquitt.

A paper "Treatment of Fractures of the Extremities," with lantern slides, was given by Dr. Guy A. Caldwell, of Shreveport, La., as the closing number on the scientific program. This paper was the high-light of the program, and was received with much attention and appreciation. It was discussed by Drs. Payne and Colquitt.

Following the scientific program a business session was held, at which the new officers for the ensuing year were elected. The results of the election were as follows:

President, Dr. J. C. Higdon, of Belzoni.

Vice-Presidents, from Humphreys County, Dr. T. J. Barclay, of Isola; from Leflore County, Dr. W. E. Denman, of Greenwood; from Sunflower, Dr. R. C. Smith, of Drew; from Bolivar, Dr. A. M. Wynne, of Merigold, from Washington, Dr. O. H. Beck, of Greenville.

The following were elected as delegates and alternates to the State Medical Association meeting next year:

Humphreys County: Delegate, Dr. G. M. Barnes, of Belzoni; Alternate, Dr. J. W. Jackson, of Belzoni.

Leflore County: Dr. L. B. Otken, Delegate; J. B. Dickens, Alternate.

Sunflower County: Dr. W. S. Wasson, Delegate; Alternate, R. C. Smith.

Bolivar County: Dr. E. R. Nobles, Delegate; E. R. McLean, Alternate.

Washington County: Dr. J. G. Archer, Delegate; Dr. T. B. Lewis, Alternate.

Secretary, Dr. F. M. Acree, Greenville.

Dr. T. B. Lewis on behalf of the doctors of Washington County invited the Delta Medical Society to hold the 1933 meeting at Greenville. This was unanimously accepted.

The following new members were welcomed into the Delta Society: Dr. N. C. Knight, Indianola; Dr. Robert Jackson, Belzoni, and Dr. J. A. Beals, Greenville.

Following the adjournment of the regular meeting the members of the Society and their ladies were tendered a banquet in the basement of the Confederate Memorial Building, at which a sumptuous spread was enjoyed by all, being interspersed with talks from various members of the Society and their guests.

The President, Dr. George Baskerville, presided.

F. M. Acree, Secretary.

Greenville,

November 11, 1932.

WILKINSON COUNTY

Drs. R. J. and S. E. Field of Centreville attended the meeting of the American College of Surgeons in St. Louis last month. Both received their fellowships in the American College of Surgeons at this meeting. Renewing old friendships

was enjoyed very much as well as the very excellent program.

Miss Doris McGraw and Miss Ida James of Centreville attended the meeting of the State Nurses Association at Biloxi this month. Both reported an excellent meeting and good programs.

S. E. Field, County Editor.

Centreville,
November 10, 1932.

HOLMES COUNTY

Dr. J. J. Kazar of Tchula attended the annual meeting of the Association of Railway Surgeons in Chicago, the first week in November.

Dr. R. M. Stephenson of Lexington went to Atlanta on November 4 and spent the week-end with his son, Robert, who is a student at Georgia Tech.

The following doctors from Holmes County attended the quarterly meeting of the Winona District Medical Society which met in Grenada Wednesday, November 9: Drs. M. E. Arrington and P. M. Smith of Tchula; P. B. Brumby, G. G. Ash, and C. J. Vaughn of Lexington; W. O. Mabry of Goodman; J. S. Rosamond of West; and R. C. Elmore of Durant. The program was unusually interesting and instructive with Drs. Underwood and Hand of Jackson and Dr. Vaughn of Lexington reading papers.

Officers for the ensuing year were elected as follows: Dr. F. L. Caruthers of Duck Hill, president; Dr. E. W. Holmes, Winona, secretary and treasurer; and a vice-president from each of the seven counties included in the district.

R. C. Elmore, County Editor.

Durant,
November 10, 1932.

ADAMS COUNTY

Dr. L. B. McLaurin attended the state fair at Jackson.

The Student Nurses Association has been organized at the Natchez Charity Hospital and the following officers elected: Miss Hazel Lusk, president; Miss Annie Nunnery, vice-president; Miss Leola Powell, treasurer; Miss Christine Fineash, secretary and reporter. A committee has been appointed to draft a constitution and by-laws. A program committee and an honor council were also named by Miss Ann Sanders, superintendent of nurses.

A delegation of members of the Adams County Registered Nurses Association attended the annual convention of the Mississippi Nurses Association at Biloxi.

L. Wallin, County Editor.

Natchez,
November 1, 1932.

NEW COUNTY EDITORS

The following appointments of County Editors have been announced as follows:

By Dr. J. W. Moody, President, Clarksdale and Six Counties Medical Society:

Bolivar County—Dr. H. C. Cockerham, Gun-nison.

Quitman County—Dr. E. A. McVey, Lambert.

Coahoma County—Dr. A. G. Everett, Friars Point.

Tallahatchie County—Dr. T. F. Clay, Tutwiler, and Dr. J. E. Powell, Charleston.

Tunica County—Dr. M. B. Jernberg, Tunica.

By Dr. J. S. Hickman, President, East Mississippi Medical Society:

Neshoba County—Dr. W. R. Hand, Philadelphia.

By Dr. W. C. Spencer, President, Northeast Mississippi Thirteen Counties Medical Society.

Chickasaw County—Dr. W. C. Walker, Houlka.

ONLY ONE COUNTY MISSING

Only one of the eighty-two counties of Mississippi is now without a County Editor for our Journal. That county is Kemper. Councilor H. Lowry Rush and President G. M. Gully—please take notice.

CENTRAL MEDICAL SOCIETY

The society held its October meeting in Yazoo City as guest of the Yazoo physicians. An elegant dinner was served by the ladies, members of the doctors' families, at the Elks' Club.

There were thirty-four members and guests present, and a most excellent program was carried out. Dr. J. H. Thompson reported an interesting case of a tumor in the stomach of a small boy due to retention of persimmon seeds and hulls. The tumor was of many weeks' standing and presented an interesting case for diagnosis.

Dr. C. R. Stingily's paper on anemias was read by Dr. Rembert, Dr. Stingily being detained by illness. This was a very interesting and instructive paper and was discussed freely by Doctors Armstrong, Womack, Swayze, Green, Gordin and Rembert.

Doctor Herrington, Jr., of Terry, read an excellent paper entitled, "The 1932 Outlook for the Young General Practitioner." He emphasized the present tendency toward preventive medicine and the attitude of the general practitioner toward public health work. His outlook was optimistic and cheerful. The paper was discussed by Doctors Swayze, Gordin and Underwood.

Dr. Lawrence Long read a paper on spinal anaesthesia in obstetrics, giving some illustrative cases, showing that there is a special field for this form of anaesthesia in selected cases of obstetrics. Dr. D. W. Jones reported that his com-

mittee on the collection agency matter had done some work but is not ready for a final recommendation. The idea is that the doctors and druggists should cooperate in conducting such an agency.

The next meeting will be in Jackson, at which time election of officers for the ensuing year will take place.

Robin Harris, Secretary.

Jackson,
November 9, 1932.

TIPPAH COUNTY

Several of our Tippah doctors were in attendance in Booneville last month when Dr. McCord was giving his course there and all seemed to be well pleased with his lectures. We feel sure we have been benefited in hearing him again, on this most important branch of medicine, in which he is so proficient. We hope it will be possible in the near future to have some other courses and would be glad to have some prominent pediatrician come for a week's lectures, as all general practitioners feel the need of all information they can get on this subject.

Dr. H. P. Clemmer and Miss Pauline Merritt of Ripley were married in October at the home of the bride, by Rev. J. B. Parker. They left next day for Asheville, N. C., where Dr. Clemmer is connected with the staff of the Veterans Hospital.

Dr. John Tate, who has been in a hospital for work in Philadelphia for some months, has come back and says he has not decided what he will do as to location.

The county health officer reports the existence of quite a number of scarlet fever and diphtheria cases in the county, but no fatal ones so far as he knows. He has been giving toxoid since spring and expects to give it the balance of the year if he can get a supply of same to complete the vaccinations.

C. M. Murry, County Editor.

Ripley,
November 9, 1932.

CALHOUN COUNTY

Several of our Calhoun doctors attended the monthly staff meeting at the Houston Hospital last week. Our staff meetings are always well attended and very interesting. After the meeting all present were served Brunswick stew.

Mrs. Mollie Hardin, aged 76 years, wife of Dr. W. H. Hardin of Calhoun City, died recently.

Dr. B. J. Shaw of Slate Springs, member of the State Board of Health from this district, was a recent business visitor to Jackson.

Dr. T. P. McGahey, wife and daughter of Birmingham, Ala., were recent visitors to relatives at Calhoun City.

We are glad to report Dr. R. A. Creekmore of Calhoun City much improved after an extended illness.

Dr. and Mrs. Shed Davis of Bruce are the proud parents of a fine young son, Shed Hill, Jr.

F. L. McGahey, County Editor.

Calhoun City,
November 8, 1932.

SOUTH MISSISSIPPI MEDICAL SOCIETY

The December meeting of the South Mississippi Medical Society will be held at the Forrest Hotel at 3 p. m., Thursday, December 8. This is the last meeting of the year and we are expecting an unusually full attendance. A very attractive program has been arranged by the program committee and among the speakers will be Dr. Willis Campbell of Memphis and Dr. Chaille Jamison of New Orleans. Any doctors in the neighboring counties who are not members of our association are cordially invited to be present.

J. P. Culpepper, Jr., Secretary.

Hattiesburg,
November 9, 1932.

FORREST COUNTY

Dr. L. B. Hudson has returned from a meeting of the American Railway Surgeons in Chicago.

It is with regret that we report the death of Mr. L. Batson, father of Dr. T. T. Batson of Hattiesburg.

Dr. Joe E. Green, formerly of Richton but now of Laurel was mingling with friends in Hattiesburg last week.

Dr. T. E. Ross, Jr., is the father of a fine son who has been given the name of Theophilus Erskin Ross III.

C. C. Buchanan, County Editor.

Hattiesburg,
November 9, 1932.

UNION COUNTY

I regret to report the death of Dr. J. T. Darden of Myrtle, which occurred at the Mayes Hospital, New Albany, October 5, 1932, following an operation for appendicitis and peritonitis.

Dr. S. H. Liddell of Ellistown is moving in the near future to Myrtle.

Dr. S. E. Eason, business manager of the New Albany Hospital, has moved his office to the hospital.

Several of the Union County physicians attended the post graduate lectures on obstetrics at Booneville. These lectures were given by Dr. McCord of Atlanta. The lectures were very instructive and I regret that all of our physicians did not avail themselves of this opportunity of

hearing them. We need more of this class of work.

Dr. C. M. Speck, New Albany, has been honored by being elected commander of Potter Henry Post of the American Legion.

Dr. G. F. Cullen, Wallerville, has been confined to the New Albany Hospital for several weeks. At the time of this writing he is much improved and will probably be on duty again soon.

Dr. and Mrs. S. E. Mason, New Albany, announce the marriage of their daughter, Mary Elizabeth, to Mr. William Bernard Biedenharn of Monroe, La., November 9, at the Methodist Church, New Albany.

H. P. Boswell, County Editor.

New Albany,

November 8, 1932.

ISSAQUENA COUNTY

Dr. T. W. Huey of Grace has been appointed part time health officer for Issaquena County by the State Board of Health. After having a full time health officer for five years, the last four years being a partnership arrangement with our neighbor, Sharkey County, Issaquena has been forced for business and economical reasons to go back to the old-time custom of having a part-time health officer.

The concomitant red tape, and inevitable expense surrounding the average health unit make it too costly for the average county in times of financial distress. Adequate health service, amply sufficient, and in keeping with the times, should and can be maintained at a fraction of the expense of the usual health unit. The cost is altogether out of proportion to the benefit derived. This marks a decided change in policy after giving the full time health unit a fair and extended trial. The taxpayers find that they have not been getting their money's worth out of it. They are arousing to the fact that they have been camouflaged, that they are furnishing the money, and mainly for the higher-ups.

W. H. Scudder, County Editor.

Mayersville,

November 8, 1932.

HARRISON-STONE-HANCOCK COUNTIES MEDICAL SOCIETY

The Harrison-Stone-Hancock Counties Medical Society held the regular monthly meeting at the Biloxi Hospital, Biloxi, November 2, with a splendid attendance. A very interesting discussion of health matters throughout the costal area was indulged in by various physicians, led by Dr. Daniel J. Williams, County Health Officer of Harrison County, whose motto seems to be "nothing is ever so good that it can't be better," in spite of the fact that his county has ranged first in efficient health supervision, low morbidity, etc.,

for many years and has been visited by foreign delegations from time to time in order to find out how he does it.

Dr. E. C. Parker, Gulfport, presented radiographs and case history of an unusually interesting case of osteomyelitis involving the entire shaft of the tibia in a child. The chief points of interest brought out were the rapid onset, short duration and extensive involvement. The case was freely discussed by the physicians present.

Following the meeting a most delightful chicken and spaghetti supper was served by the Biloxi unit of the ladies auxiliary complimentary to the doctors. It was a delicious repast prepared by one of the coast's most famous chefs, Jno. Fallo of Biloxi, and was thoroughly enjoyed by all. The next meeting will be at Gulfport, at which time Dr. Felix J. Underwood, Chief Executive, Mississippi State Board of Health, is expected to be the guest of the Society.

Geo. F. Carroll, County Editor.

Biloxi,

November 7, 1932.

HARRISON COUNTY

The Mississippi Nurses Association held its annual meeting at Biloxi, October 31 and November 1, with headquarters at the Riviera Hotel. Among the notable attending the convention were Miss Mary D. Osborne, Jackson, President; Miss Geister, New York, of the National Nurses Association; Miss Jane Van De Verde, Atlanta, Ga., of the Southern Division, National Nurses Association; and Miss Julia Tebo of New Orleans, La.

A sumptuous banquet was given Monday evening at the Riviera Hotel, prepared and supervised by the paragon of Southern hosts, Colonel Jack Apperson. The banquet was attended by many prominent residents of the coast. Dr. Felix J. Underwood, Chief Executive of the Mississippi State Board of Health, presided as toastmaster with his usual genial efficiency and pleasing personality. Interesting talks were made by President Osborne, Miss Peters of Shreveport, La., Miss Geister and Miss Van De Verde.

At the business session the following day, Miss Ethel B. Marsh of Natchez, was elected president and Meridian was selected as the 1933 place of meeting.

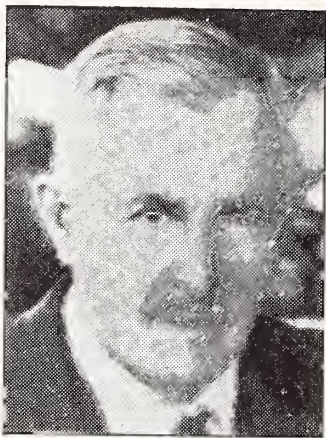
Tuesday, November 1, Dr. Felix J. Underwood, Executive Officer, Mississippi State Board of Health, was the guest speaker of the day at luncheon with the Biloxi Rotary Club. Dr. Underwood spoke interestingly upon health facts and conditions of today, complimenting Biloxi upon its excellent health record and efficient health and sanitation supervision.

Dr. Geo. F. Carroll, Biloxi, recently returned from St. Louis where he attended the 22nd annual meeting of the American College of Surgeons, at which meeting he was accorded the honor of membership in this distinctive organization.

Dr. Henry Daspit, eminent neurologist of New Orleans, was a visitor to the coast Sunday, November 6, 1932.

Geo. F. Carroll, County Editor.
Biloxi, November 7, 1932.

LEST WE FORGET THEIR GOOD WORK.



W. G. KIGER, M. D.
Brunswick, Mississippi.
President, Mississippi Medical Association,
1892-93.

William G. Kiger, M. D., the son of Col. B. G. Kiger, a well-known planter of Warren County, was born on his father's plantation at Eagle Bend, near Brunswick. He received his academic education at the University of Virginia and was graduated in medicine at Tulane, in New Orleans, in 1876.

Dr. Kiger is a man of varied accomplishments and great breadth of intellect. In addition to the practice of his profession he has had to devote much care and attention to his extensive planting interests, but found time to serve the state as member and president of the State Board of Health, his administration being markedly successful. He served as state senator from his county, from 1892 to 1930, and his career as a legislator was a boon to his profession.

He was councilor for the Sixth District from 1903 until he resigned in 1906. He was elected to honorary membership in 1932.

NOTE.—If anyone knows of any additions or corrections that should be made to the above

sketch, please communicate with Dr. E. F. Howard, Historian, Vicksburg.

ISSAQUENA-SHARKEY-WARREN COUNTY MEDICAL SOCIETY.

The regular monthly meeting of the Issaquena-Sharkey-Warren Counties Medical Society was held at the Y. M. C. A., Vicksburg, on November 8th with seventeen members and two guests present.

The scientific program included the following (Dr. Nathan B. Lewis, Vicksburg, in charge):

1. Childhood Tuberculosis.—Dr. I. C. Knox. Discussed by Drs. F. M. Smith and G. W. Gaines, Dr. Knox closed.

2. Vesical Calculus.—Dr. S. W. Johnston. Discussed by Drs. J. A. K. Birchett, Jr., and P. S. Herring. Dr. Johnston closed.

3. The Reaction of Impacted Wisdom Teeth to Disease.—Dr. Walton Shannon, D. D. S., Jackson.

Discussed by Drs. A. G. Tillman, Jr., W. C. Pool, G. W. Gaines, and E. F. Howard. Dr. Shannon closed.

On motion duly seconded and carried, the President, Dr. H. S. Goodman, appointed a nominating committee as follows: Drs. E. F. Howard, W. C. Pool, and J. B. Benton.

On motion duly seconded and carried, the Secretary was instructed to collect dues for the Women's Auxiliary at the same time as for the Society, the dues to be turned over to the Auxiliary with a certified copy of eligible members.

Plans for the annual meeting on December 13 were made and the following committees appointed:

Entertainment: General Chairman, Dr. E. H. Jones.

(a) Visits to Local Hospitals: Dr. W. G. Weston, Chairman; Doctors H. B. Goodman, G. C. Jarratt, P. S. Herring, N. B. Lewis, B. B. Martin, W. H. Parsons, A. J. Podesta, A. Street, D. P. Street, and J. A. K. Birchett, Jr.

(b) Military Park and Sight Seeing: Dr. S. W. Johnston, Chairman; Doctors C. J. Edwards, J. S. Ewing, F. M. Smith, W. E. Johnston, G. P. Sanderson, R. A. Street, Jr., and J. E. Quidor.

(c) Golf: Dr. I. C. Knox, Chairman; Doctors G. M. Street, T. P. Sparks, Jr., and L. J. Clark.

Reception: General Chairman, Dr. H. S. Goodman; Doctors A. K. Barrier, J. B. Benton, J. A. K. Birchett, V. Bonelli, M. H. Bell, M. J. Few, G. W. Gaines, H. H. Haralson, E. F. Howard, T. W. Huey, S. Myers, B. T. Orendorf, D. A. Pettit, W. C. Pool, W. H. Scudder, E. B. Stribling, W. G. Kiger, H. B. Wilson, and all members of the Society.

The meeting closed with a dutch lunch.

YALOBUSHA COUNTY

The doctors from Yalobusha County attending the meeting of the North Mississippi Medical Society, held at Oxford, were Drs. S. E. Cooper, S. L. Cox, D. C. French, L. S. Brown, and George Brown of Water Valley; Drs. H. O. Leonard and R. J. Criss of Coffeeville, and Dr. J. L. Donaldson of Oakland. A splendid meeting was enjoyed by all.

Dr. George A. Brown, accompanied by Mrs. Brown, attended the Clinical Congress of the American College of Surgeons at St. Louis, October 17-21.

Dr. and Mrs. D. C. French were visitors to Greenwood, last week.

There is no other news to report this month from Yalobusha. We hope to do better next month. There is very little sickness and none of the doctors are rushed to death. This is a splendid time to take advantage of attending medical meetings.

G. A. Brown, County Editor.

Water Valley, November 7, 1932.

LAFAYETTE COUNTY

For sometime I have been receiving requests from you for local news of the medical profession in my county. So far I have not complied with your request. In fact, I had never been notified that I was editor for my county, and until recently, was not aware of the fact. I do not think when I was appointed I was in attendance.

I think that my society could have appointed a more capable man along this line. I am not gifted in journalism. Nevertheless I will try to render some service until a new appointment has been made.

I am sending you a program of the meeting of the North Mississippi Medical Society, held at the University of Mississippi on October 5, 1932. While the attendance was not as large as we expected the meeting was a success and I think thoroughly enjoyed by everyone. We are looking forward to a greater meeting next year.

The medical profession in my county is striving to stretch the dollar as far as it will go during this time of depression. We have two private hospitals in the town of Oxford, both getting a small charity fund from the state. One of these hospitals has already used its charity fund and the other has only a few dollars left in the fund. Charity patients are still coming in, and, with the present prospect the demand this winter and in the spring for charity will be greatly in excess of the amount appropriated by the state.

I am signing off for this time.

E. R. Bramlett, County Editor.

Oxford, November 7, 1932.

PEARL RIVER COUNTY.

The satsuma orange groves and packing houses in this county look like prosperity now. Oranges are being gathered, packed and shipped by the carloads. And you will find no better grades than those sent out from Picayune.

Dr. V. B. Martin and W. T. Thornhill have been busy for some time making complete physical examinations of all of the employees of the Goodyear Yellow Pine Company and the Crosby Certified Products Company. Such a procedure on the part of all employers would be a protection to themselves and their employees also. It would save the respective counties much money that is now being spent on damage suits.

I notice from the reports of our physicians for the past month that there have been quite a number of cases of influenza with a few cases of pneumonia.

School examinations are being made by the members of the health department. The percentage of undernourished and underweight children is found to be far less than anticipated at a time such as the present. Maybe we are in a much better condition physically than we would have been if money was more plentiful. I guess we will all live through it.

G. E. Godman, County Editor.

Poplarville, November 7, 1932.

PONTOTOC COUNTY.

The many friends of Dr. J. U. Abernathy will be glad to learn that he is recuperating from a recent operation performed at the Baptist hospital in Memphis, Tenn.

Dr. J. R. McCord of Emory University has just completed a series of lectures on obstetrics at Booneville, which was well attended by physicians in surrounding territory.

Miss Pauline McGregor of Randolph, daughter of Dr. A. H. McGregor, entered Baptist Hospital at Memphis for training a few days ago.

Plenty of sickness, but in the words of Ham-bone, "It is not worth cultivating."

Dr. J. M. Hood of Houka is able to be out after a week's illness.

The next meeting of the Northeast Mississippi Thirteen Counties Medical Society will be at Aberdeen the second Tuesday in December. Let's go!

R. P. Donaldson, County Editor.

Pontotoc, November 7, 1932.

STATE BOARD OF HEALTH.

Dr. James R. McCord, Professor of Obstetrics and Gynecology of Emory University Medical School, will conduct a course of lectures at Clarksdale during the week beginning December 5. Dr. V. B. Harrison, health officer and secretary of the Clarksdale and Six Counties Medical Society,

is in charge of arrangements. Physicians from that section of the state are urged to attend.

The regular meeting of the Mississippi State Board of Health will be held in the office of the executive officer, Old Capitol, on December 12, at 7 P. M.

More physicians in Mississippi are filing birth records promptly this year than ever before. Undertakers are filing death records according to the regulations, except in occasional instances.

The following attended the meeting of the American Public Health Association in Washington: Dr. J. A. Milne, Dr. T. Paul Haney, Jr., Dr. T. W. Kemmerer, Dr. Felix J. Underwood, and Mr. H. A. Kroeze. Drs. Haney and Milne were given the trip by the Commonwealth Fund and they went several days in advance in order to attend the institute on health education held prior to the American Public Health Association meeting.

Dr. R. G. Hand, Quitman, has been named health officer of Clarke County.

Dr. T. Paul Haney, Sr., Iuka, is now serving as Tishomingo County Health Officer.

Dr. John W. Shackelford, director of the Washington County Health Department for the past several years, was given a fellowship on September 15 for a year's study at Harvard University. This fellowship was given by the Rockefeller Foundation through the State Board of Health. Dr. A. R. Perry, former director of the Yazoo County Health Department, is now in charge of the Washington County Health Department.

En route to Washington to attend the American Public Health Association, the following workers from the Texas State Board of Health stopped for a day to visit the Mississippi State Board of Health: V. M. Ehlers, Ben L. Grimes, Mrs. John Claybrook, Mrs. M. Pierson, H. E. Hargis.

Dr. J. B. Black, who for more than ten years served as full-time health officer, first of Lee and later of Hinds County, was in Jackson for a visit to the central offices of the State Board of Health. Dr. Black is now director of the Rutherford County, Tennessee, Health Department. This department is one of the counties in Tennessee receiving the co-operation of the Commonwealth Fund and much good work is being accomplished under the leadership of Dr. Black.

The annual Conference of Health Workers will be held in Jackson on December 12, 13, and 14. Dr. Allen Freeman, Professor of Public Health Administration, Johns Hopkins University, will give two lectures each day. Other speakers will be Dr. G. A. Wheeler, of the U. S. Public Health Service; Dr. L. M. Graves, Health Commissioner, Memphis; and Dr. J. D. Dowling, Director of

the Jefferson County, Alabama, Health Department, Birmingham. All county health officers and sanitary inspectors are expected to be in attendance at this conference and any physicians who are interested in attending are cordially invited to do so.

It is hoped that many physicians from Mississippi will attend the meeting of the Southern Medical Association in Birmingham on November 16, 17 and 18. There will be many worth while contributions to the program and the fellowship to be had there with the leaders of organized medicine will be valuable.

In Grenada County the local tuberculosis association is conducting a clinic in all the schools. Dr. Mildred S. Fatheree of the Sanatorium is the clinician and in making these tuberculin tests, the Mantoux method is being used. Excellent co-operation from the schools, professional people, and the public in general is being received. When this clinic is finished about November 12, over one thousand children will have been tested.

During the month of October requests from two foreign countries were received for pamphlets which the State Board of Health has on malaria and screening and mosquito-proofing of houses. One was from Rome, Italy, and the other from the Near East Foundation. The requests stated that the bulletins would be nativized and used in their own countries.

F. J. Underwood, Executive Officer.
Jackson, November 4, 1932

HINDS COUNTY.

A good crowd of Hinds County doctors motored to Yazoo City to attend the October meeting of the Central Medical Society. A wonderful dinner was served and every one had a good and profitable time.

The staff of the Jackson Infirmary met October 31, enjoyed the usual good meal and had a splendid program.

The staff of the Baptist Hospital met November 1, with a splendid attendance. The program was most interesting.

Dr. and Mrs. Ewing Gordon and Dr. Barksdale have been in Chicago this week where the doctors were attending the annual meeting of the railroad surgeons.

Dr. Julius Crisler is spending a week at Hot Springs, Arkansas.

Dr. Temple Ainsworth has just returned from Cleveland, Ohio, where he spent ten days at the clinics there.

Dr. H. F. Magee recently spent several days visiting the hospitals in Atlanta.

W. F. Hand, County Editor.
Jackson, November 4, 1932.

TISHOMINGO COUNTY.

There is a minimum amount of illness in Tishomingo County. We are very proud that it is so. We feel that the extremely good health is attributed to the fact that people are eating less this fall than usual.

Dr. T. P. Haney is getting along fine with his part time county health work.

All of eight of our doctors attended lectures on obstetrics in Booneville, a few weeks ago. All enjoyed and profited by the lectures.

Collections are almost nil this fall. We are still working and hoping.

Of the ten doctors in the county Dr. K. F. McRae of Belmont is the only one who can have the pleasure of being a grandfather.

A. E. Bostick, County Editor.

Iuka, November 4, 1932.

LEFLORE COUNTY.

Dr. G. D. Williams of Lake Providence, La., visited his sister, Mrs. C. C. Smith, on October 15.

Dr. J. B. Stone and daughter of Memphis, Tenn., visited in the home of Mrs. C. M. Henderson on October 30.

Messrs. Tate Carl, Hughes Chander, Allen Winters, and Stirling Rule, who are attending the University of Tennessee Medical Department at Memphis, Tenn., spent the week end, Halloween, in the Carl home.

Miss Lizette Sandifer, daughter of Dr. F. M. Sandifer, is working on her M. A. degree at Peabody.

Dr. and Mrs. E. W. Hunter are announcing the marriage of their daughter, Jane Watt, to Mr. Frank Hayne Barnwell of Thornton, the wedding took place Thursday, November 17, at 6 P. M., at the First Presbyterian Church.

Dr. G. M. Godfrey of Carrollton was injured in an automobile wreck at Carrollton on October 20. He was brought to the Greenwood-Leflore Hospital by Dr. Sanders, Jr. of Carrollton. He was able to leave the hospital in a few days to resume his practice.

Dr. R. B. Yates was recently elected Commander of the Keesler-Hamrick-Gillespie Post of the American Legion at this place.

Dr. Mark A. Booth, colored, of this place, committed suicide by shooting himself with a pistol, while seated at his desk on October 19.

Dr. J. T. Spencer, retired, formerly post-master at this place, is the Republican nominee for Congress from this the third district.

Drs. Geo. Baskervill, L. A. Barnett, J. P. Kennedy, and W. B. Dickins were the guests of Dr. L. H. Hightower of Itta Bena at the meeting of the Itta Bena Rotary Club November 3, to hear Dr. Felix Underwood address the club. Dr. Underwood was detained in Jackson but we were

well repaid for our visit as we heard an address by Mr. Francis of Greenville, on the "Causes and Cure of the Depression."

W. B. Dickins, County Editor.

Greenwood, November 4, 1932.

CLARKSDALE AND SIX-COUNTIES MEDICAL SOCIETY.

At the recent semi-annual meeting of the Clarksdale and Six-Counties Medical Society in Clarksdale, officers were elected as follows:

President, Dr. J. W. Moody, Charleston.

Vice-Presidents: Dr. H. L. Cockerham, Bolivar County; Dr. A. G. Everett, Coahoma County; Dr. E. A. McVey, Quitman County; Dr. T. F. Clay, Tallahatchie County; Dr. M. B. Jernberg, Tunica County.

Secretary, Dr. V. D. Harrison, Clarksdale.

Member of the Board of Censors for three years, Dr. D. O. Pierce, Jonestown.

Chairman, Medico-legal Defense, Dr. J. W. Gray, Clarksdale.

J. W. Lucas, Councilor, First District.

Moorhead, November 2, 1932.

MONROE COUNTY.

My kingdom for some thrilling news that I might pass on to my confreres through your fine Journal! We could not function without it and you. But it pains me to know and confess that I shall not be able to help you this time. But that you (all) may know that I am willing to try to serve. I shall answer "present but not voting."

Speaking of voting reminds me that our nation is on the verge of an election. I presume that practically every one feels the galvanic charge that fills the air. What with the press and above all the radio service that is available now, there is little excuse for ignorance as to the propaganda that has been perpetrated. Nevertheless, there seems little room for doubt as to what the national conclusions are. It will soon be over—let us hope that better things are in store. My county (Monroe) is, I suspect, in about as good condition financially as any county in the state and it is fearfully bad here. For several months I have devoted practically all my time to the direction of a relief program. Nothing less than this intimate contact with the affairs of my people could have convinced me of the desperate straits to which the people have been forced. Of course I have definite ideas as to the cause of this condition, but why discuss them? When a great conflagration is raging, we gain nothing by discussing the origin. The great and only vital question is what can and should be done to stop it.

Since my last communication I attended the meeting of the North Mississippi Seven-Counties Society at the University. It was a most enjoyable occasion. The weather, for the day, was superb. The attendance, though not large, was

satisfactory. The program was interesting. Talent of very exceptional character was in evidence. Dr. McLester, one of the South's—I might say one of the Nation's—outstanding men, contributed to the program. Some of the best of the Memphis contingent were there. It was a fine meeting of fine men. Your correspondent enjoyed the occasion to the fullest degree. My good friend, Dr. Summerford of Smithville, transported me to the meeting and back to my home. The intimate association with him during several hours' ride was very pleasant and interesting indeed.

Nothing has happened to any of the county doctors that I feel constrained to mention. I might say that Dr. Ewing has had erected a small but very nice office building. He and Dr. A. I. Boozer have moved their offices into this new building. Dr. Ewing told me that since material and other costs of construction are so very low now that he figured interest on money borrowed to erect the building is less than rental on other property. But the general impression seems to be that he is making so much money that he had to find a way to spend some of his surplus.

G. S. Bryan, County Editor.

November 4, 1932.

PRENTISS COUNTY.

Dr. W. V. Davis was confined to his bed several days last week on account of illness, but is back "in harness" again.

Dr. S. L. Pharr has been quite ill for the last two weeks, but is improving nicely at this time. He has been in the Baptist Hospital, Memphis, since Monday, October 31.

Dr. W. H. Sutherland attended the meeting of the American College of Surgeons in St. Louis and the Interstate Post-graduate Assembly in Indianapolis the latter part of October. Dr. and Mrs. H. B. Southerland motored to Indianapolis.

Dr. R. B. Caldwell of Baldwyn was in Booneville several times in the last two weeks on professional business.

R. B. Cunningham, County Editor.

Booneville, November 4, 1932.

ATTALA COUNTY.

We are still on the map in Attala County by being careful, looking forward for better times. We had Dr. McCord with us for five days beginning October 24. We had good attendance from the adjoining counties and all who attended the lectures were well repaid for their time. Dr. McCord is one of the best instructors on obstetrics and gynecology.

The Winona District Medical Society will meet at Grenada, on November 9. We hope to have a good attendance and good meeting. We are to elect officers at this meeting.

C. A. Pender, County Editor.

Kosciusko, November 4, 1932.

WINSTON COUNTY.

Several doctors of Louisville attended the meeting of the East Mississippi Medical Society at Meridian the 20th instant. We enjoyed a good program and are indeed grateful to Drs. Riley and Coleman for the sumptuous eats sponsored by them on this occasion.

The writer and wife, Mrs. Montgomery, spent a short time pleasantly with Dr. Willis Walley and his good lady, Mrs. Walley, while at the meeting in Meridian.

Dr. McCord of the Emory University, a teacher in obstetrics who has been lecturing at Kosciusko, was guest in our city one night last week. Several of our doctors have been attending his lectures and have been benefited very much.

Dr. Bernard Hickman has been attending court in Meridian for several days.

In a short time a debate would be timely, "Resolved: That Roosevelt Should Not Have Been Elected President of the U. S. A."

The Winston County Medical Fraternity changed its regular time of meeting from 7:15 P. M. to 5 P. M. the same date in each month, the second Tuesday. Any visiting doctors are always appreciated in our meetings.

W. L. Montgomery, County Editor.

Louisville, Miss., November 4, 1932.

WARREN COUNTY.

On Tuesday, December 13, the Issaquena-Sharkey-Warren Counties Medical Society will hold its annual meeting. A splendid program has been prepared. The scientific program may be found elsewhere in this issue and the presence of such noted men insure its success. A banquet will be served, golfing, auto rides, visits to the hospitals, etc., will be arranged for any who are interested. Those desiring such arrangements should please notify Dr. Edley H. Jones, who is Chairman of the Entertainment Committee.

The ladies of the Medical Auxiliary to the Issaquena-Sharkey-Warren Counties Medical Society are planning to hold a luncheon meeting on the same day. It is hoped that every doctor will come and bring his wife.

Drs. George M. Street and J. A. K. Birchett, Jr., attended the recent meeting of the American College of Surgeons at St. Louis.

Dr. and Mrs. Augustus Street attended the Railway Surgeons meeting in Chicago. Mrs. Street returned but Dr. Street spent a few days at the Mayo Clinic.

Dr. Richard Street, Jr., also spent a few days at the Mayo Clinic.

Quite a number of doctors are planning to attend the Southern Medical Association meeting at Birmingham. Dr. Leon Lippincott will attend the Southern Branch of the American Public Health Association, as well as the Southern. Drs.

I. C. Knox, W. H. Parsons, Guy C. Jarratt and Edley H. Jones will also be in attendance.

E. H. Jones, County Editor.

Vicksburg, November 13, 1932.

MISSISSIPPI CONFERENCE OF SOCIAL WORK.

At the Mississippi Conference of Social Work, October 27-29, at Jackson, Dr. Felix J. Underwood presided at the opening session and Dr. C. D. Mitchell, led the discussions at the mental clinic held at the State Insane Hospital.

PIKE COUNTY MEDICAL SOCIETY.

The Pike County Medical Society held its regular October meeting in conjunction with Eighth Councilor's District Medical Meeting in McComb, October 11. The next meeting of the Pike County Medical Society will be Thursday, November 3. Dr. J. R. Waugh of the United States Health Service, Hot Springs, Arkansas, has accepted our invitation to be with us then. He will present a paper on "The Practical Diagnosis and Treatment of Venereal Diseases." Dr. Waugh will be available for consultation to Pike County physicians and visiting physicians at the City Hall in McComb from 1:30 until 4:30 P. M. The regular meeting will begin at 7:30 P. M.

T. Paul Haney, Jr., Secretary.

McComb, October 20, 1932.

PIKE COUNTY.

Dr. G. W. Robertson of Magnolia will leave in November for four months of post graduate work at Tulane University.

Dr. T. Paul Haney, Jr., is planning to be out of the city after October 21 and until November 1. He will be away for the purpose of attending the American Public Health Association meeting in Washington.

Dr. Clarence L. Scamman of the Commonwealth Fund of New York will visit Pike County on or about November 1.

Mrs. Thomas B. Abney experienced what might have been a serious automobile accident but fortunately she escaped with minor injuries.

Dr. Robert H. Brumfield, McComb, is now attending the meeting of the American College of Surgeons in St. Louis.

T. Paul Haney, Jr., County Editor.

McComb, October 29, 1932.

SOUTHERN BRANCH, AMERICAN PUBLIC HEALTH ASSOCIATION.

On November 14, at Birmingham there was organized the Southern Branch of the American Public Health Association with an attendance of approximately 100 health workers. Dr. Felix J. Underwood, Executive Officer of the Mississippi State Board of Health, was chosen chairman of the organization meeting and presided. The

scientific sessions continued through November 15.

The following members of the Mississippi State Medical Association took part in the organizing: Dr. F. J. Underwood, R. N. Whitfield, T. W. Kemmerer, W. E. Noblin, and H. C. Ricks all of Jackson; Dr. F. M. Smith, Vicksburg, and Dr. T. Paul Haney, Jr., McComb.

A number of other public health workers of Mississippi were in attendance.

SOUTHERN MEDICAL ASSOCIATION.

The twenty-sixth annual session of the Southern Medical Association was held in Birmingham, November 15-18. Including November 17, there were registered 1209 doctors and 216 ladies. The scientific programs of the various sections were well prepared and interesting and the scientific exhibits covered many phases of present day medicine. A number of affiliated societies, including the Women's Auxiliary to the Southern Medical Association, held their meetings in the same week. Numerous entertainment features were provided by the Jefferson County Medical Society and its Auxiliary for the visitors. Birmingham did itself proud and it was a good meeting.

Those registering from Mississippi were: Anderson, W. H. (wife), Booneville; Austin, R. B., Jr., Forest; Cranford, R. H., Laurel; Crawford, W. W. (wife), Hattiesburg; Blount, W. N., Laurel; Cooper, I. W., Meridian; Darrington, Gilruth, Yazoo City; Dearman, W. A., Gulfport; Dugger, J. W., (wife), Jackson; Field, Samuel E. (wife), Centerville; Guyton, B. S., University; Hall, R. W., Jackson; Jones, Edley H., Vicksburg; Kroeze, H. A. (wife), Jackson; Lippincott, Leon S., Vicksburg; Long, Lawrence W., Jackson; Mitchell, C. B., Agricultural College; McCormick, H. G., Laurel; McRae, W. W. Corinth; Parker, E. C. Gulfport; Plummer, James R. (wife), Deemer; Polk, L. L. (wife), Purvis; Rafferty, D. G., Pass Christian; Rehfeldt, E. E. Jackson; Stallworth, W. L., Columbus; Underwood, F. J., (wife), Jackson; Arrington, Geo. Lamar, Meridian; Flynt, M. L., Newton; Green, Joseph E. Richton; Jones, D. W., Jackson; Parsons, W. H., Vicksburg; Philpot, V. B. (wife), Houston; Simmons, C. L., Hazelhurst; Walker, B. N. Jackson; Walley, Willis, Jackson; Womack, N. C., Jackson.

WOMEN'S AUXILIARY TO THE MISSISSIPPI STATE MEDICAL ASSOCIATION.

President—Mrs. W. C. Pool, Cary.

President-elect—Mrs. M. L. VanAlstine, Jackson.

State Convention, Jackson, May 9, 10, 11, 1933.

Mrs. Leon S. Lippincott, Vicksburg, Press and Publicity Chairman.

A CHRISTMAS GREETING FROM OUR PRESIDENT.

Again we are nearing the birthday of our King,

and the times and circumstances make it a momentous one.

Half of our year's work is behind us and we have made it good. The loyal cooperation you have given me as your president has smoothed many rough places in the road and made this service a labor of love.

My wish for you is that the sorrows of the past year may prove a benediction and the joys may grow into greater ones, and all during the coming year we may work together even more efficiency and accomplish even greater things for our auxiliary.

So, I say with all my heart, may your Christmas be a Merry One, and the New Year a Happy one!

Mrs. W. C. Pool.

HOMOCHITTO VALLEY.

The ladies of the Homochitto Valley Medical Society Auxiliary were invited to be the guests of Mrs. C. E. Mullins, Bude, on October 6. There were 12 members and 2 guests present.

After a most delightful lunch and social hour, the meeting was opened by our president, Mrs. Mullins, welcoming Mrs. Pool, our state president and most interested friend.

Mrs. Pool expressed her pleasure at being able to be with us at the meeting held in our birthday month, and to be with us at the election of officers.

The minutes of the last meeting were read and approved. Then followed the election of officers. Mrs. Mullins was re-elected as president by a unanimous vote.

Mrs. S. R. Townes gave several short readings, some sense and some nonsense.

Mrs. Pool gave an interesting and instructive talk on "Three Basic Principles."

A continuance of the Preventorium work was voted upon as the principal work for the coming year.

Our next meeting to be held in Natchez will be an open meeting at which we hope to draw in a goodly number of new members.

Mrs. Wm. K. Stowers.

Natchez, October 26, 1932.

JACKSON.

A note of general interest is the announcement of the engagement and approaching marriage of Miss Georgianna Louise Ogee, of Natchez and Pork Gibson, to Dr. Temple Ainsworth of Jackson. The marriage will be performed on December 3, at Port Gibson.

Dr. and Mrs. A. E. Gordin were numbered among those present at the meeting of the surgeons of the Illinois Central railroad in Chicago.

Dr. and Mrs. J. O. Segura have received word from their daughter, Heloise, a freshman at New-

comb, New Orleans, that she has been pledged to the Chi Omega sorority.

Dr. J. W. Barksdale and son, Henry, attended the meeting of the surgeons of the Illinois Central railroad at Chicago.

Mrs. W. L. Hughes.

Jackson, November 9, 1932.

WASHINGTON COUNTY UNIT.

Women's Auxiliary to the Delta Medical Society.

Mrs. W. C. Pool of Cary, visited in the home of Dr. and Mrs. L. C. Davis in Greenville on November 3. Mrs. O. H. Beck, wife of the advisor to the Washington County Unit, offered Mrs. Pool a pleasant courtesy at the Country Club. A number of ladies called during the hour to meet Mrs. Pool.

The preliminary arrangement committee for the Washington County Unit met on the 10th of November at the King's Daughters' Hospital to plan for the general organization meeting for the unit. It was decided that a luncheon meeting probably fits the needs in this county. This committee goes forward at this time toward arranging such a meeting at the Country Club next week. Each of the committee has made herself at the Country Club next week. Each of the committee has made herself responsible for the notification of from four to six women from the county and reports a satisfactory interest and hopes to have a full attendance.

Mrs. H. L. Cockerham of Gunnison, Councilor for the First District for the Auxiliary, will attend the organization meeting of the Washington County Unit.

Mrs. John A. Beals.

Greenville, November 11, 1932.

WOMEN'S AUXILIARY TO THE DELTA MEDICAL SOCIETY.

The Vice-Presidents of the Delta Society have been appointed as advisors to the new units being organized in their counties by the Women's Auxiliary. These physicians are: Dr. O. H. Beck for Washington, Dr. W. E. Denman for Leflore, Dr. T. J. Barclay for Humphreys, Dr. R. C. Smith for Sunflower, Dr. A. M. Wynne for Boliver. These appointments were made by Dr. J. C. Higdon, President of the Delta Medical Society, sometime since.

Leflore County has some ten members of the Women's Auxiliary and goes forward toward the organization of the Leflore Unit at this writing. Mrs. J. C. Adams, Greenwood, is President of Leflore Unit.

Mrs. T. B. Holloman and Mrs. B. B. Harper, Itta Bena, as by-laws committee, are at work on the by-laws for the Auxiliary to the Delta Medical Society.

The appointments of vice-presidents for the Counties of Sunflower, Bolivar and Humphreys to serve as presidents to the Units of the Women's Auxiliary are being made by the President of the Women's Auxiliary to the Delta Society this week and will be announced in the next Journal.

The president of the Women's Auxiliary to the Delta Society is very appreciative of the interest and kindly co-operation shown in the details and plans of organization by both the members of the Delta Society and their wives, the prospective members of the Auxiliary.

Mrs. John A. Beals, President.
Greenville, November 11, 1932.

WINONA DISTRICT.

It is my pleasant duty to write you of our organization of the Women's Auxiliary to the Winona District Medical Society.

On Wednesday afternoon, November 9, 1932, while the doctors were assembled, we met in one of the Sunday school rooms of the First Baptist Church in Grenada. The state president, Mrs. W. C. Pool of Cary, was with us and explained the purpose of the auxiliaries and the method of organization. Though some of our counties were not represented, we organized with the following officers: President, Mrs. J. K. Arent, Grenada; Vice-President, Mrs. E. C. O'Cain, Winona; Secretary-Treasurer, Mrs. J. S. Sharp, Grenada; Press and Publicity, Mrs. S. S. Caruthers, Duck Hill; Parliamentarian and Hygeia Chairman, Mrs. J. O. Ringold.

The next meeting will be held in Winona, December 7, at 2 P. M., in the home of Mrs. E. C. O'Cain. Efforts will be made to have a full meeting with representatives from all six counties represented in the Winona District Medical Society.

Mrs. S. S. Caruthers.
Duck Hill, November 9, 1932.

VICKSBURG.

Mrs. W. C. Pool, Cary, was the guest of Dr. and Mrs. E. F. Howard while enroute to Grenada, where she helped organize a new auxiliary to the Winona District Medical Society.

Dr. R. A. Street, Jr., is visiting the Mayo Clinic at Rochester, Minnesota.

Dr. J. A. K. Birchett, Jr., attended the meeting of the American College of Surgeons at St. Louis.

Dr. George Street attended the meeting of the American College of Surgeons at St. Louis, and later went to the Interstate Post Graduate Assembly in Indianapolis, Indiana.

Mr. L. L. Coats of Bastrop, brother of Mrs. H. H. Haralson, was badly injured recently in an automobile accident near Tallulah, Louisiana.

Mrs. Mary Jiggets who has been visiting her daughter, Mrs. Edley Jones, and family, left for her home in Canton last week. She was accompanied by Mrs. Jones and little son.

Mrs. L. J. Clark's sister, Mrs. Lane Busic, has been visiting in Vicksburg several days. Dr. and Mrs. Clark are also enjoying a visit from the former's mother and father.

Dr. and Mrs. A. Street spent a few days last week in Chicago. Dr. Street went on to Rochester, Minnesota, while Mrs. Street returned home.

Dr. and Mrs. A. J. Podesta are to spend a week or two in New Orleans where the latter's son is a student at Tulane.

Dr. and Mrs. Geo. Street had as their house guests Miss Katherine Nobel, Fayette, and Miss Dorothy Street, Memphis.

Dr. and Mrs. D. A. Pettit had their niece, Miss Martha Hyland of New Orleans, as their guest last month.

Mr. and Mrs. Sidney Johnston had Miss Huff of Clinton as their guest last week.

Mrs. H. H. Haralson.
Vicksburg, November 10, 1932.

ISSAQUENA-SHARKEY-WARREN COUNTIES.

The Women's Auxiliary to the Issaquena-Sharkey-Warren Counties Medical Society will hold its regular monthly luncheon-meeting in the Coral Room of the Vicksburg Hotel, on November 15. Mrs. M. H. Bell is to have charge of the program, "Christmas Seal Sale." Mrs. L. J. Clark will have charge of the table decorations.

These luncheon meetings have always been most popular, and every one who attends them seems to enjoy each one more than the last. We hope for a large attendance, at this meeting in particular, as we are all interested in the tuberculosis welfare work, for which the Christmas Seal Sales are made.

Mrs. H. H. Haralson.
Vicksburg, November 10, 1932.

ANNUAL MEETING.

On December 13, at noon, in the Vicksburg Hotel, Coral Room, will be held the annual election of officers of the Women's Auxiliary to the Issaquena-Sharkey-Warren Counties Medical Society. Besides this important business, a special program is being arranged by the committee in charge for the entertainment of visitors. Invitations have been issued to the speakers who are to be on the program of the Medical Society, and their wives, Dr. and Mrs. I. I. Lemann, and Dr. and Mrs. Amedee Granger, of New Orleans, and Dr. and Mrs. Williard Barlett, Jr., of St. Louis; to Dr. J. M. Acker, Jr., Aberdeen, president of the Mississippi State Medical Association, and Mrs. Acker; Dr. T. M. Dye, Clarksdale, secretary

of the Association; Dr. H. S. Goodman, Cary, and Dr. Leon S. Lippincott, Vicksburg, president and secretary of the local medical society; and to Dr. E. F. Howard, Vicksburg, advisor to the auxiliary.

TRIBUTE.

MRS. WALTER JACKSON FREEMAN.

Mrs. Walter Jackson Freeman, Philadelphia, Penn., President of the Woman's Auxiliary to the American Medical Association, died in Philadelphia, October 26, 1932.

The distressing news of Mrs. Freeman's serious illness came the first part of October, but later it was reported that she was cheerful, and indications were of a sure if slow recovery. The news of her death was, therefore, a shock to the entire membership of the auxiliary, but particularly to those who have had the good fortune to know her personally, and who esteemed and loved her.

Mrs. Freeman was very active in her role as national president; in September she made a trip that took her to Wisconsin, Illinois, Iowa, Missouri, Michigan, Indiana, and West Virginia. She was to have addressed the Virginia State Medical Society and its Auxiliary at their November meeting.

We, members of the Women's Auxiliary to the Mississippi State Medical Association, bow our heads in silent tribute to the dear little lady with a most inspiring personality, who was our National Auxiliary President, Mrs. Walter Jackson Freeman.

Mrs. Sidney Johnston.

Vicksburg, November 10, 1932.

HONOR ROLL.

The following have made this number of our Journal possible:

County Editors—L. Wallin, F. L. McGauhy; C. C. Buchanon, G. F. Carroll, William F. Hand, R. C. Elmore, W. H. Scudder, E. S. Bramlett, W. B. Dickens, W. H. Frizell, G. S. Bryan, J. O. Ringold, G. E. Godman, T. Paul Haney, Jr., R. P. Donaldson, R. B. Cunningham, C. M. Murry, A. E. Bostick, H. P. Boswell, E. H. Jones, S. E. Field, M. L. Montgomery, G. A. Brown.—23.

Societies—Central, Robin Harris, secretary; Clarksdale and Six Counties, J. W. Lucas, counselor; Delta, F. M. Acree, secretary; East Mississippi, T. L. Bennett, secretary; Harrison-Stone-Hancock, E. A. Trudeau, secretary; Issaquena-Sharkey-Warren, L. S. Lippincott, secretary; Pike County, T. P. Haney, Jr., secretary; South Mississippi, J. P. Culpepper, Jr., secretary; Eighth Councilor District, Dr. W. H. Frizell, counselor, Dr. T. P. Haney, Jr., secretary; Mississippi State Hospital Association, Dr. J. G. Gardner, president.—10.

Hospitals—Biloxi Hospital, E. A. Trudeau; Mississippi Baptist Hospital, L. W. Long; Vicksburg Sanitarium.—3.

Other Contributors—L. J. Clark, E. H. Jones, Mrs. W. L. Hughes, Mrs. John A. Beals, Mrs. S. S. Caruthers, Mrs. S. W. Johnston, J. A. K. Birchett, Jr.; F. J. Underwood, E. F. Howard, Mrs. H. H. Haralson, Mrs. W. K. Stowers, Mrs. L. S. Lippincott, Mrs. W. C. Pool.—13.

Grand Total—49. Your Editors Thank You.

BOOK REVIEWS

The American Illustrated Medical Dictionary: By W. A. Newman Dorland, A. M., M. D., F. A. C. S. Philadelphia and London, W. B. Saunders Company. 1932. pp. 1493. Price, \$7.50.

This sixteenth edition of a dictionary which first appeared 32 years ago illustrates what can be done with a book to perpetuate it if the revision is done with care and with intelligence. This new edition, as the previous ones, has been thoroughly revised in every respect. Many new words have been added and most of these have never previously appeared in a dictionary. As the previous editions, the definitions are succinct, accurate and carefully worded. The dictionary has stood the test of time and undoubtedly will continue to function as one of the standard medical lexicon for many years.

J. H. MUSSER, M. D.

Internal Medicine, Its Theory and Practice: In Contribution by American Authors: Edited by John H. Musser. Philadelphia, Lea & Febiger. 1932. pp. 1365. Price, \$10.00.

Professor Musser begins the preface to the new text book of which he is editor, as follows: "The ever increasing perplexities of internal medicine and the steadily mounting mass of facts that pertain to disease make it an impossibility for any one man to write with authority on such a large subject." In planning a text by a number of contributors Professor Musser has attempted to secure the benefits of authorship by many experts in the various fields of medicine without loss of unity and compactness. He, therefore, has allowed each of his twenty-seven contributors considerable liberty in presenting his subject as best suited to his fairly large field. Fragmentation and overlapping of subjects have been avoided. The contribu-

tors are distinguished as practicing internists, teachers, or investigators, and are exceedingly well qualified to handle their subjects. The high quality of the authorship is shown in a particularly satisfactory fashion in sections dealing with subjects now in a confused state, such as diseases of the kidney and of the alimentary tract or where the mass of data is so great as to make presentation difficult as is true with heart disease. Each chapter or section is followed by a brief but well chosen list of references. There is a good index. The printers as well as the editor and contributors have done their work well. The result is an important addition to medical literature. The reviewer enthusiastically recommends the book to physicians and medical students.

R. H. TURNER, M. D.

Modern General Anesthesia: By James G. Poe, M. D. 2d ed. rev. and enl. Philadelphia, F. A. Davis Co. 1932. Illus. pp. 231. Price, \$2.50.

Dr. Poe has made a good job in re-writing his book. It is written from the teacher's point of view and for students. His detailed explanations are complete. His charts show much thought and are good.

The chapter on ether is good, and sufficient to give to the student a working knowledge of its use.

Dr. Poe's opinion on the non-use of morphine in children under 15 years is open to question. Most of the best anesthetists of the country use it with very gratifying results. Dr. C. H. Robson, anesthetist for the Hospital for Sick Children in Toronto, who has had very extensive experience in anesthetizing children, says that children stand morphine well in rather large doses.

The chapter on nitrous oxide is devoted too much, in the reviewer's opinion to the advertising of a machine. The author advocates an uneven flow and a "guessed-at" mixture of gases as being most satisfactory. This method of using the interrupted and uneven flow of gases to secure and maintain a proper anesthetic mixture was the best we had once, and served in a way, but that day passed with the appearance of better machines.

As a whole, the book is well worth reading.

ANSEL M. CAINE, M. D.

Accidents, Neuroses and Compensation: By James H. Huddleston, M. D., with a foreword by J. Ramsay Hunt, M. D., Sc.D. Baltimore, The Williams & Wilkins Company. 1932. pp. 256. Price, \$4.00.

This volume, composed of twelve chapters, is well written and properly catalogued, in sequence, arrives at a timely period in our civilization and especially as the herd is at present in the throes of the various social and economic delapidation procedure.

The chapters in themselves are filled with interesting reading matter, instructive in every

detail, the ones especially dealing with post traumatic psychoses, psychopathy and malingering in which various interpretations are given of these conditions by men renowned in their specialties, following which the one on treatment which is adequately covered.

The most interesting, and the one of necessity applicable to the present situation, is the one on compensation wherein it gives the results of the various decisions and commissions including money paid at the present time to the ex-service man of the various countries. It also includes the so-called "Play Boy" Guilds (the examiner's own connotation), applicable to that type of individual who, like the "Lillies of the Field," toil not neither do they spin, etc.—the one on prophylaxis could be given a first place on any essayist's honor list.

There is much bibliography and complete index.

To sum up, a book that should be in the hands of neuropsychiatrists and those dealing with compensation of all types inasmuch as we, in the professional fields, are constantly meeting the types mentioned in the following dialogue:

Physician to Patient: How sick are you and where are you hurt?

Patient to Physician: I can't tell you yet, I have not consulted my lawyer.

Later on, an episode similar to the following:

Lawyer to Patient: You must have a nervous breakdown.

Patient to Lawyer: But I have not.

Lawyer to Patient: Well, I can arrange that.

WALTER J. OTIS, M. D.

Hospitals and Child Health: Pub. by White House Conference. New York, The Century Co. 1932. pp. 279. Price, \$2.50.

In "Hospitals and Child Health," a publication of the White House Conference on Child Health and Protection, is presented a mass of valuable and suggestive information which was secured by three subcommittees of the White House Conference during over a year's study and investigation of the whole problem of the relationship of the hospital towards the health and welfare of children.

The first part of the book presents the findings of the Subcommittee on Hospitals and Dispensaries, of which Clifford G. Grulee, M. D., of the Rush Medical College of the University of Chicago, is chairman. This part surveys the situation in children's and orthopedic hospitals, dispensaries, and posture clinics.

The second part presents the findings of the Subcommittee on Convalescent Care, of which Adrian V. S. Lambert, M. D., of the Welfare Council of New York City, is chairman. This part considers the situation in convalescent homes and offers practical suggestions for improving the service and increasing the number making use of convalescent care.

The final part of the book presents the finding of the Subcommittee on Medical Social Service, of which Ida M. Cannon, R. N., of the Massachusetts General Hospital, is chairman. It offers a careful summing up of conditions in rural and in urban communities and indicates how activities should be encouraged.

L. VON MEYSENBUG, M. D.

Practical Treatise on Diseases of the Digestive System: By L. Winfield Kohn, M. D., F. A. C. P. Philadelphia, F. A. Davis Co. 1930. 2 v. Price, \$12.00.

In these two volumes the author has covered a wide scope dealing with practically every phase of disease of the digestive system, to an extent which necessitates brevity and curtailment in many instances. Great stress has been laid on the physiological aspect of the digestive organs, as well as upon the clinical interpretation of the various pathological conditions discussed. The view point of the author follow the commonly accepted channels and offer no striking originality. The inclusion of a chapter on oral pathology covering diseases of the mouth, tongue, teeth, pharynx and salivary glands proves a distinct addition to the work, since this constitutes an important subject too frequently overlooked in similar treatises on gastro-enterology. In a separate chapter on "Diseases of Other Organs Producing Gastro-Intestinal Symptoms," the author has dealt in a very practical way with the broad relationship existing between the digestive tract and pathological states in other parts of the body. Full attention is directed to radiological considerations and the illustrations in this respect, as well as in all others, are well selected and quite adequate.

Probably the greatest deficiency of the work, as a whole, from the standpoint of the practitioner, lies in a lack of proper therapeutic detail. This subject is handled in a very elementary way, with a list of heterogeneous medical formulae offered. The all important individual and selective type of treatment is not sufficiently emphasized; nevertheless, the merits of the work far outweigh the relatively few deficiencies as outlined above and the volumes can be recommended highly as a valuable addition to the doctor's library.

DONOVAN C. BROWNE, M. D.

Primary Carcinoma of the Lung: By B. M. Fried, M. D. Baltimore, Williams & Wilkins Co. 1932. pp. 247. Price, \$5.00.

This volume is a splendid summary of a significant subject. Incidence, etiology, histology, signs and symptoms are discussed. Numerous case reports with splendid illustrations are presented. A good bibliography and index are noteworthy.

I. L. ROBBINS, M. D.

The Treatment of Syphilis: By Jay F. Schamberg, A. B., M. D., and Carroll S. Wright, B. Sc., M. D. New York, D. Appleton Co. 1932. pp. 658.

This monograph is written in thirty-three chapters dealing with the treatment, results of treatment, the various reactions some times encountered, the care of such patients, and resume of the literature as to causes for reactions. There is also complete index of authors and subjects.

This volume is the most conservative, rational and thorough treatise on syphilis written to date. The authors have reviewed and abstracted many different schools of thought, giving the idea of each school on subjects still in doubt as to causes of certain reactions encountered in the treatment of syphilis. The pharmacology and chemotherapy of the different drugs used in the treatment of syphilis are discussed. The book needs no advertising to introduce it to you. It should be on the used shelf of every practitioner's and specialist's library.

The authors know what they are writing about and tell it in words that the reader can understand. It is a one volume encyclopedia on syphilis.

M. T. VAN STUDDIFORD, M. D.

Endocrine Medicine: By William Engelbach, M. D., F. A. C. P., B. S., M. S., D. Sc. Springfield, Charles C. Thomas. 1932. 3 v.

In his foreword to this work, Dr. Lewellys F. Barker has truly said, "It requires bravery, and prodigious, concentrated industry, even for one who knows his way about in medical bibliography, to attempt to master, and to summarize for others, the present status of the anatomy and physiology of the endocrine glands; that of the clinical syndromes that have been described and of the pathological-histological changes and the alterations in body chemistry and physics that underlie them; and that of the relations of the internal secretions to heredity, to constitution, and to the biology of the person and of the race. Dr. Engelbach possesses both the bravery and the necessary capacity for industry."

Dr. Engelbach has done more than trace the history of the development of our present knowledge and summarize the anatomical and physiological basis of this knowledge. These volumes are colored throughout by his own extensive experience in this field. Their encyclopedic character makes them of great value as a work of reference to the student of endocrinopathy, while the practical discussions of definite illustrative cases will prove helpful to the puzzled clinician. The illustrations are numerous, well reproduced and instructive. The chief criticism that the reviewer would make is that the arrangement of the work seems to him to be clumsy. It would be preferable to consider

all of the diseases of the thyroid, for instance, in one place, instead of taking up thyroid disturbance in different places and in different volumes under the headings infantile, juvenile, adolescent and adult. The author has done this in the case of each of the endocrinopathies, so that in order to study the disorders of any one organ it is necessary to turn to three or four different places.

I. I. LEMANN, M. D.

The Technique of the Non-padded Plaster Cast:

By Fritz Schnek, M. D., with a preface by Lorenz Bohler, M. D. Vienna, Wilhelm Mau-drich. 1932. pp. 139.

This translation of Dr. Fritz Schnek's book on *The Technique of the Non-padded Plaster Cast* is a supplementary work of Lorenz Bohler's *Treatment of Fractures* in which the description of cast technique was necessarily condensed. It is a most timely and welcome treatise on this modern method of bone immobilization and the proper usages of plaster casts. The work presents the treatment of fractures with non-padded plaster and covers besides a consideration of casts in general a detailed description of their application in all varieties and types of fractures.

It is, as far as I know, the only book of its kind available on a subject which has largely been incorporated in texts on minor surgery.

This book is a most comprehensive study of plaster casts and should find a much needed place in the libraries of those who deal with fractures.

In a rather limited experience with the non-padded cast, it seems to offer a big step forward in the correct immobilization following the reduction of fractured bones.

This is a small book, written and translated in a clear, concise style, profusely and well illustrated. It is heartily recommended by the writer.

WALDEMAR R. METZ, M. D.

Medicine and the State: The Relation Between the Private and Official Practice of Medicine; With Special Reference to Public Health: By Sir Arthur Newsholme, K. C. B., M. D., F. R. C. P. Baltimore, Williams & Williams Co. 1932. pp. 300. Price, \$3.50.

In three previous volumes Sir Arthur Newsholme placed on record an invaluable collection of facts regarding the current trends in medical practice in the countries of Europe.

In "Medicine and the State" we see the evidence of Sir Arthur's critical analysis of this record.

Since Sir Arthur Newsholme alone and personally obtained the facts, it is gratifying to find that the attempt to interpret them is left to him.

Whether the reader agrees or disagrees with Sir Arthur's criticisms, suggestions or prophecies, he is stimulated to deeper thought on the problems himself and will as often as not, find that his own

opinions have been clarified and possibly crystallized.

During the reading of this book the reviewer felt that he was listening to a real authority on these controversial problems. He believes that other readers will sense the same satisfaction in listening to the judgment of this "high court" of opinion.

But Sir Arthur Newsholme is but one voice and he insists repeatedly in his writings that he be taken as such. We therefore make no effort to review his opinions here but heartily recommend that every medical man who senses his own responsibility in preserving or reshaping our present medical practice in America read this book.

Sir Arthur has here given us a flying start in the pursuit of our professional welfare.

W. H. PERKINS, M. D.

Electrosurgery: By Howard A. Kelly, M. D., LL.D., F. A. C. S., and Grant E. Ward, M. D., F. A. C. S. Philadelphia, W. B. Saunders Company. 1932. pp. 305. Illus. Price, \$7.00.

A well written, well printed, well illustrated book by well informed electrosurgeons. The senior author is one of America's pioneers in "the incoming era of electrosurgery as a coadjutor." The junior author has contributed many original refinements in technic and has devised a number of practical electrodes for this work. The history, physics, and general principles of electrosurgery and high frequency currents constitute the first four chapters. These are well worth reading and rereading. Twelve succeeding chapters concern the practical applications of electrosurgery in diseases of various regions of the body and in certain specialties—the skin, oral cavity, otolaryngology, thyroid, breast, abdomen, gynecology, urology, proctology and central nervous system. The chapter on electrosurgery of the thorax is by Thomas Bayron Aycock, and the chapter on electrosurgery in bladder tumors by Hugh H. Young.

By virtue of his many years of experience in the use of radium in malignancy before and since the advent of electrosurgery, the senior author is well qualified to write the concluding chapter on Irradiation and Electrosurgery, pointing out that, while in many fields they are coadjutors, in others one may remain supreme.

The volume contains 382 illustrations, photographs, and drawings elucidate, amplify, and clarify the text. An excellent bibliography of 480 references is appended. Surely the skeptic who studies this text cannot but say, I read, I saw, I was impressed with the possibilities of electrosurgery.

The final chapter on electrosurgery has not yet been written, the last refinement of technic has not yet been accomplished, but, "novel as is the realm and indeterminate, electrosurgery opens up a vista,

we believe, destined in no small measure to replace scalpel, ligature, and hand contacts with wounds, as well as notably to pare down the number of those listed as inoperable by skilled surgeons."

NATHAN H. POLMER, M. D.

The Chemistry of Tuberculosis: By H. Gideon Wells, M. D., Ph. D., and Esmond R. Long, M. D., Ph. D. Baltimore, Williams & Wilkins Company. 1932. pp. 481. 2d ed. thoroughly rev. Price, \$7.00.

All who have treasured Gideon Wells' Chemical Pathology will be delighted with this thoroughly revised, almost re-written, second edition of the Chemistry of Tuberculosis. Compiled and reviewed is the existing knowledge of the chemistry of the tubercle bacillus. The changes in the host and the chemical aspects of the treatment of tuberculosis are considered in detail. In this field paradoxes abound and disappointments are many, for with all the recent work calculated to develop a specific or an indirect chemotherapy for tuberculosis we must still rely on rest, general hygienic care, food and sunshine.

MAURICE SULLIVAN, M. D.

Quantitative Clinical Chemistry (Volume 2—Methods): By John P. Peters, M. D., M. A., and Donald D. Van Slyke, Ph. D., Sc. D. Baltimore, The Williams & Wilkins Company. 1932. pp. 957.

This excellent compendium of laboratory methods is an invaluable asset to the biochemical analyst. The book comprises thirty-seven chapters devoted to a description of available methods for the quantitative determination of substances in biological gases, fluids and solids.

Each chapter is prefaced by a discussion of the principles on which the methods are based and the discussions are often extended to include other methods not detailed in the volume. Each chapter is closed with an extensive bibliography. The first two chapters, dealing with chemical and special biologic technic, supply a fund of information which will aid the analyst in the handling of

materials and in the avoidance of common sources of error.

Wherever possible, the authors have selected standard methods describing for each substance methods of different types, including gravimetric, colorimetric, titrimetric and gasometric procedures and in advisable cases micro and macro modifications. The book includes an appendix which cites various tests for organ function notably tests for liver function and kidney function.

S. B. NADLER, Ph. D.

PUBLICATIONS RECEIVED.

The C. V. Mosby Company, St. Louis: Synopsis of Gynecology, by Harry S. Crossen, M. D., F. A. C. S., and Robert James Crossen, M. D. Clinical Gynecology, by C. Jeff Miller, M. D.

W. B. Saunders Company, Philadelphia: The Colon, Rectum and Anus, by Fred W. Rankin, M. D., F. A. C. S., J. Arnold Bargaen, B. S., M. D., F. A. C. P., and Louis A. Buie, B. A., M. D., F. A. C. S.

J. B. Lippincott Company, Philadelphia: Children's Tonsils In or Out, by Albert D. Kaiser, M. D.

F. A. Davis Company, Philadelphia: Practical Obstetrics, by P. Brooke Bland, M. D.

The Williams & Wilkins Company, Baltimore: Oral Spirochetes and Relative Organisms in Fusospirochetal Diseases, by David T. Smith, A. B., M. D. The Differential Diagnosis of Endocrine Disorders, by Allan Winter Rowe.

The Macmillan Company, New York: Cultivating the Child's Appetite, by Charles Anderson Aldrich, M. D.

Charles C. Thomas, Springfield: A Handbook of Experimental Pathology, by George Wagoner, M. D., and R. Philip Custer, M. D.

The Rockefeller Foundation, New York: The Rockefeller Foundation Annual Report, 1931.

The University of Chicago Press, Chicago: University Student Health Services, by Don M. Griswold, M. D., D. P. H., and Hazel I. Spicer. A Community Medical Service Organized Under Industrial Auspices in Roanoke Rapids, North Carolina, by I. S. Falk, Ph. D., Don M. Griswold, M. D., D. P. H., and Hazel I. Spicer.

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RADIUM AND THE MENOPAUSE

LESTER J. WILLIAMS, M. D.

BATON ROUGE, LA.

The word "menopause" or "menopausis", according to Dunglison's Medical Dictionary, is defined as "The natural cessation of the menses, occurring usually between the ages of 45 and 50." Among the laity, it is commonly called the critical time or turn or change of life.

We, of the medical profession, recognize this condition as something more than the simple stopping of the menstrual flow. It means, too, the cessation of the functioning of the female reproductive organs, and with this occur the vaso-motor disturbances: the hot flushes, sudden perspiration, dizziness and headaches. There are also irritability and psychic disturbances, as well as a retrogressive change in the reproductive organs and the glands of internal secretion.

To the average individual with normal organs, the climacteric, which usually begins at about 40 years and lasts from one to several years, should cause no serious trouble. This is the ideal menopause and takes place so gradually and with no little physical upheaval that the patient hardly realizes that she is undergoing what is, to some women, a terrifying epoch. In this normal menopause, menstruation may stop suddenly, or the periods become irregular, with less and less blood lost at each period. The intervals become longer until there is a complete cessation.

With this type there is nothing that can be prescribed other than symptomatic treatment and rest in bed during the flow, but with the other type, in which the hemorrhage is alarming and without demonstrable cause, it seems that radium is the remedy *par excellence*.

Watson is of the opinion that the flooding at the menopause is due to a lack of balance between the ovarian secretion and the uterine muscles. If the ovary is still strong enough to bring about the histological changes in the uterine mucous membrane that result in the menstrual flow and the uterine muscle cannot normally contract on account of being partially replaced by fibrous tissue, and, because of thickening and sclerotic changes, the capillaries in the endometrium are unable to close by collapse of their walls, then there is flooding that is severe and prolonged.

To restore this balance radium is apparently a remedy that does its work well, so much so that Martindale terms radium a "specific for the treatment of climacteric hemorrhage."

In selecting cases for radium the greatest care is exercised to exclude acute pelvic infections, this restriction also includes the cases that are free from present infection, but which give a history of an earlier involvement. That these cases have been avoided is shown by the absence of serious results in this type of treatment.

The following cases which have been selected from a series in which radium was

used to expedite the climateric, show something of the results obtained:

CASE REPORTS

Miss F. C., aged 43 years, white, unmarried female, referred by Dr. McHugh. Prior to the application of radium on May 25, 1930, this patient was apparently in extremis, having lost a large amount of blood from the uterus. Under gas anesthesia, a thorough vaginal examination was made; no lesions were disclosed. The vaginal vault and cervix were blanched from loss of blood. Four 12½ mgm. radium needles in brass and rubber applicator were inserted in uterine cavity well up towards fundus and allowed to remain for 48 hours. The result was most gratifying, the menopause completing quickly and without great discomfort. Over a year has elapsed since radium was used, and patient is apparently normal, performing her clerical duties regularly.

The next case is a sister of the first case, an unmarried female, 48 years of age, also referred by Dr. McHugh. Profiting by the experience of her younger sister this patient after a profuse uterine bleeding for ten days, was sent by her attending physician, Dr. McHugh, to Our Lady of the Lake Sanitarium with a diagnosis of uterine bleeding and ovarian dysfunction near the menopause. On November 18, 1930, under ethylene gas anesthesia four 12½ mgm. radium needles were placed high up in the uterine cavity for 48 hours. Other than the results of a profuse hemorrhage no abnormalities were discovered. There was no further hemorrhage. The menopause was established rather easily, and the patient soon returned to work. At present she is employed as a saleslady and works daily, standing during practically entire working hours.

The third case is Mrs. B. H. C., aged 50 years, white, married female, referred by Dr. Robert. In her case the reason for the application of radium was a menorrhagia of menopausal origin. On November 11, 1929, an intrauterine application of 50 mgm. of radium was used and allowed to remain for 24 hours. Hemorrhage had stopped on the patient's discharge from the hospital on November 12, 1929. On July 16, 1931, her physician advised that she had materially improved and, while she still had some menopausal symptoms, he considered her condition entirely satisfactory.

Dr. Tom Spec Jones referred the fourth case, that of Mrs. D. H., white, married female, aged 48 years. Her operative history consisted of a dilatation and curettage and amputation of the cervix in 1916. In the latter part of 1929, she menstruated continuously for three months and after this had a severe menorrhagia every three weeks. An intrauterine application of radium

2400 milligram hours, on May 31, 1931, stopped the flow after one menstrual period. She is now gradually returning to normal health.

The next two cases were referred by Dr. Chamberlin.

Mrs. M., aged 41 years, white, married female, consulted her physician in 1926, who diagnosed an intramural uterine fibroid. On December 7, 1926, an intrauterine application of 600 milligram hours of radium was made; which resulted in a shrinkage of the tumor and normal menstruation until about June, 1928, when she began flooding. This was thought to be due to the menopause, and on July 11, 1928, 1200 milligram hours of radium was given. The result was a complete cessation of the menses and a rapid establishment of the climacteric.

Mrs. S., a physician's wife, aged 45 years, was given 1200 milligram hours of radium well up in the uterus as soon as the menopause began. She was warned to expect two and possibly three periods after the application of the radium. Her family history showed the menopause had been established in her female relatives rather stormily, but in her case after radium, she had two free menstrual flows, followed by complete cessation.

METHOD OF APPLICATION

In some hospitals the intrauterine application of radium is made in dressing rooms with ordinary aseptic care. While this may be sufficient, I feel safer when the strictest asepsis is maintained. The patient is prepared by being given an ounce of castor oil the night before, and, on the morning of the application, a soap-suds enema is given and also a sodium bicarbonate douche. The patient is then shaved and prepared for radium.

As to the choice of anesthetics, ether, ethylene gas, or nitrous oxide has been used with equally good results. On account of the nausea ether is least used, for the possibility of dislodging the radium with violent retching must be thought of. In some cases, we have transient nausea without an anesthetic, but this is probably due to the presence of a foreign body in the uterus.

While there is danger of traumatizing the parts with excessive packing of the vagina, there is still the added safety feature of protection to the bladder and rectum in the large pack, and therefore, I do not

think there should be any hesitation in providing this additional safeguard.

The patient is not allowed to void, but catheterized every 6 to 8 hours. This is done for several reasons, first, because the tightly packed vagina makes urination difficult; secondly, the regular withdrawal of the urine keeps the distended bladder from close contact with the radium, and finally the effort of voiding may displace the radium.

SUMMARY

1. The use of radium in acute pelvic infections should be avoided.

2. Radium occupies a prominent place in the treatment of menopausal hemorrhage with results that prove its value.

3. In this series of cases the hot flush or flash is the only constant symptom in the menopause produced by radium.

4. As a result of radium applied in these cases there have been no psychic disturbances, nor have there been any changes in the age appearance, secondary sexual characteristics or libido sexualis. There has been only one case of obesity and obesity in this case may be a family characteristic.

5. It has been found preferable to use a single dose in producing the artificial menopause, fixing a standard dosage at 1200 milligram hours, this varying with the individual patient.

6. The nearer the patient to the menopause, the smaller the dosage necessary.

7. In all of the cases in which a "follow up" was practical, there was not one that developed malignancy.

8. Practically all of the patients were improved in health after the use of radium.

9. The menopause produced by radium does not differ materially from that produced surgically.

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ADEQUATE HEALTH AND MEDICAL SERVICE TO ALL THE PEOPLE ALL THE TIME, THE BASIC FACTOR IN COMMUNITY HEALTH, WEALTH AND HAPPINESS.*

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In his book, "Health and Wealth," Dr. Louis I. Dublin, Chief Statistician, Metropolitan Life Insurance Co., points out that while land is one of the basic factors of wealth, that health is indispensable to the acquisition of wealth as a community problem. Community health, then, is of the deepest concern to everyone

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in the community, not only to the laborer but to the owner of land, the factory or the commercial enterprises which thrive in proportion as labor thrives. This problem of community health is looming larger and larger as a basic factor in our daily life, and in proportion to the intelligent attention directed to its study and application, will community progress and wealth be reflected.

Since childhood most of us have heard it said that in China doctors are paid while people are kept well, but that the doctor's pay stops when the people become sick, and that consequently the doctor strives to keep them well. Whether such a reverse-English regime exists, or ever existed in China, there is some doubt, but the idea has a rational slant and if studied in detail offers some very interesting leads.

Medical history is replete with proof that the doctor throughout the ages has been an idealist, a benefactor to the human race, and commercialism to the contrary, notwithstanding, the same may be said of him today. The very fact that but few doctors, relatively, become rich, except those who have judiciously invested their earnings; that the great majority of them live for the good of the community, as they see it, is further proof of their idealism, and by reason of this they are today carrying a load that the community should shoulder, each and every member of the community, and not merely the governing bodies of communities, and when the community does decide to shoulder its own part of the obligation to furnish preventive as well as curative medicine, then and only then will there be adequate health and medical service for all the people all the time. However, be this as it may, the public, in a general sense still looks upon the doctor as being the one responsible for the carrying of this community burden, and in a sense the doctors are to blame, for they have always carried it, and people just naturally have a confidence in them born of the close, almost parental feeling that

the family has had for generations for its medical adviser. So there is a sort of spiritual or psychic relation between the doctor and the public, his public, or at least his part of it that makes him thrill with psychic response to the dependence placed in him by patients who come to or send for him in consultation. But to show that this confidence is often abused by the patient, we quote the following rather pessimistic lines:

"God and the Doctor, we both adore,
Just on the brink of danger, not
before:
But the danger past, both alike are
required—
God forgotten and the doctor slighted."

We hear much today, of the "commercialism" of medicine and the great fortunes amassed by certain physicians, especially surgeons, and the "cold business management" of their "clinics," but when the truth is known, the most of these men are just the type of man who actually loves humanity for humanity's sake, and has been gifted with a sense of "organization," which if directed into strictly commercial channels would have made him a "king of finance" or a "master of industry," and who quite as often as not has, to use Emerson's figure of speech, "builded his house in the woods" and "men have beaten a track to his door" because he produced a type of service not equaled in another part of the world.

In all cases this has been done through co-operation, the combined efforts of the person conceiving the plan and some Community Organization alive to the possibility and feasibility of the dream of the visionary; for we have an occasional visionary, who, while his head is in the clouds, his feet are quite firmly placed on the ground; these are the men who have succeeded in spite of the "it-can't-be-dones," the "croakers" and the "it-never-has-been-dones" who are ever ready to

place themselves as mere bulk, as handicaps in the great, wide way to progress. These men, and many women as well, are the ones who leave their names along the highway of life to cheer and stimulate the earnest plodders who follow and do their bits that humanity may be better served.

"What man has done, men can do," especially when backed up by the silent, inspired faith of a woman or a group of women, as often as is the case in the type of institution we have in mind. Indeed, unless such an institution has as co-workers a band of women there is small chance of success; and what is a community enterprise of any kind without the joint interest and devotion of the women of that community? So, the gist of my argument is that, when the public is awakened to the realization of the power that lies within the combined efforts of men and women, the young people as well as the older and more mature, that we may look for great things to happen in that community. Especially will this be the realization of intelligent, concerted action applied to the proposition of rendering adequate health and medical service to all the people all the time, be the community large or small.

Dr. S. C. Barrow, past president of the Louisiana State Medical Society, in a little talk before the Lafourche Valley Medical Society recently, made a strong appeal to the members to stimulate interest in the Woman's Auxiliary to both local and state societies, and that these auxiliaries interest themselves in things vital to the society. These auxiliaries could be made to function in many ways other than simply as social adjuncts to the parent society, and no doubt they will soon become of great worth to the community as well as to the medical society.

The twentieth century is an age of co-operation. We see it in every phase of life, and in proportion to the intelligent intensity of its application is progress reflected thereby.

"Health is purchasable," we are told, and especially is this true of "public health."

Dr. C. E. A. Winslow, Professor of Public Health in Yale School of Medicine, defines Public Health as follows:

"Public health is the science and art of preventing disease, prolonging life, and promoting physical health and efficiency through organized community efforts for sanitation of the environment, the control of community infections, the education of the individual in principles of personal hygiene, the organization of medical and nursing service for the early diagnosis and preventive treatment of disease, and the development of the social machinery which will ensure to every individual a standard of living adequate for the maintenance of health; organizing these benefits in such fashion as to enable every citizen to realize his birthright of health and longevity."

The above is quoted from "Public Health Law," by James A. Tobey, M. S., LL. B., himself an outstanding figure in the realm of public health teachers, and he further quotes Dr. Winslow as saying of his definition of public health, thus: "Public health conceived in these terms will be something vastly different from the exercise of the purely police power which has been its principal manifestation in the past."

A close study of the principles laid down by Dr. Winslow bears out our statement that organization of community resources is the fundamental basis for success in procuring adequate health and medical service to all the people all the time, and when the public is made to understand its obligation to provide this protection, and made to see at what a trifling cost it can be obtained, it should be no great task to arouse all the people to co-operate all the time for the provision of the blessings attendant on such a community organization.

It needs no statistician, no statesman, but merely the understanding of a school-boy to calculate what can be done by the joining together of the small sums weekly or monthly collected from all the families in a relatively small community and placed

in the hands of a community organization for the provision of adequate health and medical service to all the people all the time, yet if one has not taken the pains to make such a calculation it will be startling and yet, we hold back.

So then, let the community be aroused to its obligation to the doctor, and obverse-ly, the doctor's obligation to the community, for under our present system, neither the doctor nor the community receives adequate compensation, the doctor in the way of what he should have for services rendered, and the community in what it should have in the way of preventive as well as curative medical measures.

It is now quite certain that the younger generation of medical students will be trained in preventive medicine as well as in the curative phase of the profession. Most of the high-class universities and medical schools are preparing to give courses in this important branch of medicine and within a few years the doctor will be as much alive to prevention as he is to the cure of disease.

No article, however short or hurriedly written, would be excusable for not mentioning the newly established National Institute of Health, to replace and enlarge on the duties of the former Hygienic Laboratory at Washington, and which is to be under the administration of the Surgeon General of the U. S. Public Health Service. This Institute is destined to play a far greater part in the education and training of young men in the field and laboratory study of disease and disease prevention than yet dreamed of by the public at large.

The world changes, and never in the history have these changes been so rapid, so startling and far reaching, for distance, relatively, no longer exists, and time is measured almost as is light, with a rapidity almost inconceivable by the finite mind. What was measured in hours a generation ago is now but the ticking of the clock, and who can say what further and more breath-taking changes will come with tomorrow?

Many more striking illustrations of this need for community organization¹ might be presented, but surely to an intelligent community nothing further is needed to prove that adequate health and medical service to all the people all the time is a basic need if we are to keep up with the rapid and epoch-making changes above mentioned.

So in conclusion, let us all, both doctors and lay public, earnestly and sincerely give the deepest concern to fostering the idea of co-operation of all community interests to the end that all may become convinced of the feasibility of procuring and providing adequate health and medical service to all the people all the time, and that it is a community responsibility and not wholly the obligation of the doctors nor entirely the concern of appropriating bodies to provide this most valuable contribution to the health and also the wealth of the community at large.

And when we have established, in both urban and rural areas, pure drinking water and a safe milk supply; have provided proper disposal of human excreta and other disease-bearing waste materials through sewer systems for the cities and towns and sanitary pit privies and septic tanks for rural community, and also properly screened houses to prevent the entrance of disease-carrying insects; have seen that vaccinations against typhoid fever, diphtheria and smallpox have been systematically administered; when we have established means by which an expectant mother, an unborn and new-born child, the year-old and two-year-old toddler, the pre-school, grade and high school pupils of all ages can have adequate health and medical service: when we have safeguarded our young women and young men who are soon to be the mothers and fathers of the coming generations, we will be doing no more than fulfilling a part of society's obligation to society at large.

Let us not forget that Health is Wealth.

ROENTGENOGRAPHIC VISUALIZATION OF THE LIVER AND SPLEEN AS AN AID IN THE DIFFERENTIAL DIAGNOSIS OF TUMORS OF THE ABDOMEN.*

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AND

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Recently¹ we have been successful in roentgenographically visualizing the liver and spleen in the human by the utilization of a stabilized colloidal suspension of thorium dioxide‡ administered intravenously. It has therefore been possible, by this method, to investigate more thoroughly tumors of the abdomen, especially those of the upper right and left quadrants.

The procedure is a modification of the basic methods proposed by Oka,² Radt,³ and Kadrnka.⁴ The solution used contains 25 per cent thorium dioxide, suspended in a stabilized colloidal state. Thorium is opaque to the roentgen rays, due to its being a heavy metal (atomic weight, 232.15). On administration into the blood stream, the reticulo-endothelial cells of the liver and spleen engulf the colloidal particles, and wherever reticulo-endothelial cells are situated in these organs there will be present in them particles of thorium dioxide. Since these cells are distributed in considerable numbers in the liver and spleen, there is a difference in shadows cast between these organs and other structures not possessing reticulo-endothelial cells, whenever radiograms after the administration of thorium dioxide are made. It is this difference in shadows cast that makes possible the more detailed anatomical study of the liver and spleen. The reticulo-endothelial cells elsewhere and the polygonal

hepatic cells and cells of the splenic pulp do not engulf the thorium dioxide, except where larger doses are given over a comparatively short interval of time.⁵ The thorium particles probably remain in reticulo-endothelial cells indefinitely, usually, only about one-half the amount injected being excreted at the end of three months.

The largest dose necessary for proper roentgenographic visualization of the liver and spleen is approximately 0.20 grams of thorium dioxide per kilogram of body weight. Thus, for an individual weighing seventy kilograms, fourteen grams of thorium dioxide is given, which is equivalent to 46 c.c. of 25 per cent thorium dioxide solution. It is desirable to administer the solution in broken doses of approximately 20 c.c. each. Each dose is given over a period of eight to ten minutes, the solution having been previously warmed to body temperature. Larger doses had been used in some of our cases before we had determined that smaller doses would suffice our purposes.

Injections are repeated at forty-eight hour intervals, until three doses are administered. This dosage renders both liver and spleen completely opaque in the radiographs, the liver having approximately the density of the vertebrae and the spleen that of the ribs. If only the outline of these organs is desired, only one-half to two-thirds the above dosage is required. Forty-eight hours after the last injection, a plain antero-posterior radiograph is taken at a distance of 55 cms. with a Potter-Bucky diaphragm, using a potential of 78 K.V.'s and a current of 30 milmps for 4½ seconds. Depending upon the size of the individual, the time of exposure may be increased to five or six seconds.

Perhaps a preferable procedure, and one which we have followed lately, is the use of 90 K.V.'s and 50 milmps for two seconds, with a Potter-Bucky diaphragm. The shorter time interval is advantageous in that there is less opportunity of movement on the part of the patient during the

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‡This solution is available at present under the trade name "Thorotrast-Heyden."

exposure. This relatively large exposure will render the lung fields black.

We have visualized, roentgenographically, twenty-two patients for diagnostic purposes thus far. Six of these cases have been selected in order to exemplify the use of this method as an aid in the differential diagnosis of tumors of the abdomen.

Case 1. Mrs. T. R., Hospital No. 28212. Admitted 8/20/31. Discharged 10/2/31. White female. Fifty years of age. Diagnosis: Slight splenomegaly. Besides the probability of a small splenic tumor, she was suffering from myocardial hypertrophy and decompensation, chronic nephritis with hypertension and senile dementia. She was given three doses of thorium dioxide solution, 25 c.c. each, over a period of four days. Two days after the last injection, radiographs were taken, results of which are shown in Figure I.

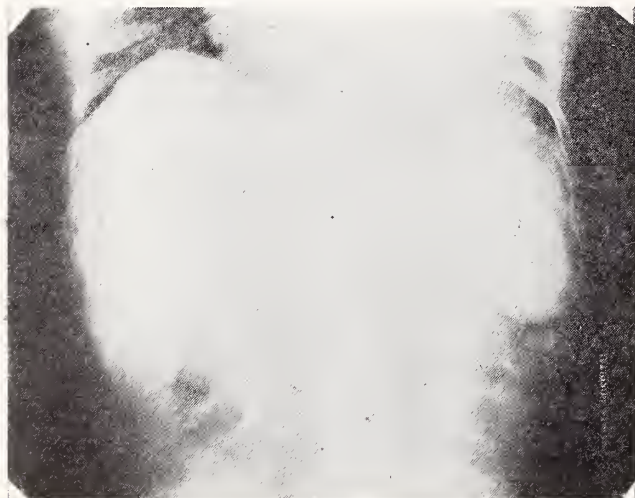


Fig. I. Mrs. T. R. Slight splenomegaly; probable chronic passive congestion.

The radiograph shows the shadows of the liver and spleen densely and clearly. The spleen is seen to be slightly enlarged.

At no time, were any untoward symptoms noted and the patient improved slightly. She was discharged to her home on February 1, 1932.

Case No. 2. S. J., Hospital No. 38467. Admitted 11/5/31. Colored male. Fifty-two years of age. Diagnosis: Probable pernicious anemia with marked splenomegaly. This patient presented a blood picture simulating pernicious anemia with ataxia and a large movable mass in the upper left quadrant which was probably a splenic tumor. He was unable to walk about and had to remain in bed. He was given three doses of thorium dioxide solution, 25 c.c. each, over a period of four days. Two days after the last injection, he was radio-

graphed. The results obtained are shown in Figure II.

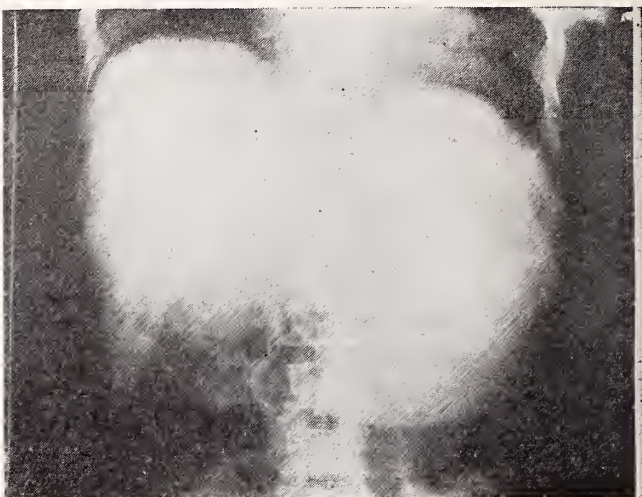


Fig. II. S. J. Splenomegaly; probable pernicious anemia.

The mass is clearly outlined and is definitely a splenomegaly. The liver is clearly shown. Apparently, the reticulo-endothelial cells are normally distributed throughout both organs and have not been destroyed by fibrosis, tumor or cyst.

At no time were any untoward symptoms noted. He was then put on a pernicious anemia diet, and liver extract. He began to improve, and at the time of his discharge he was able to return to his work. His blood picture had returned to nearly normal and his spleen reduced to one-half its size on admission.

Case No. 3. J. L. V., Hospital No. 1651. Admitted 1/15/32. Died 1/20/32. White male. Seventy-six years of age. Diagnosis: Portal cirrhosis, possible malignancy of stomach or colon. This patient was admitted in a semi-comatose state, bordering on uremia, with marked abdominal distention, and congestion and edema of bases of both lungs. He presented a mass in the left upper quadrant of the abdomen, which could not be differentiated from a splenic tumor.

He was given two doses, 25 c.c. each, of thorium dioxide solution, each dose twenty-four hours apart. A radiograph was taken twenty-four hours after the last dose. During this time, he was given much stimulation by drugs in an effort to prolong his life. The radiograph shows the spleen not to participate in the formation of the mass. The liver presents a striking picture of irregular areas of density and rarefaction, the latter most probably being neoplastic nodules, Fig. III. No gastro-

intestinal series was possible, due to the moribund condition of the patient on admission.

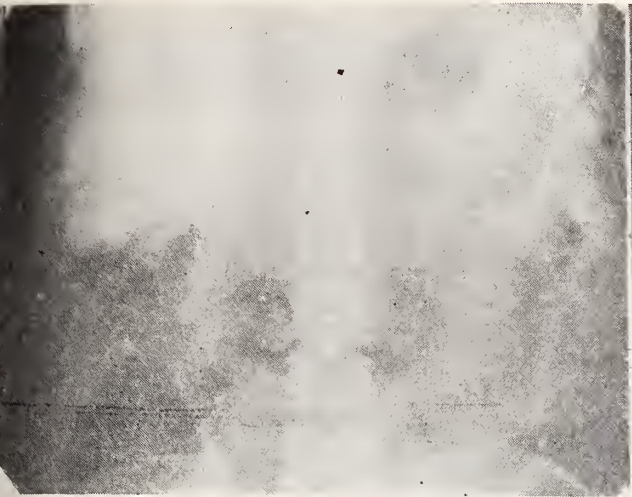


Fig. III. J. L. V. Radiograph showing spleen and liver; neoplastic nodules present in liver; abdominal distention marked

The diagnosis of tumor of stomach or body and tail of the pancreas with metastasis to the liver was made. Autopsy revealed a slightly enlarged spleen, due to passive congestion and carcinoma of the body of the pancreas with metastasis to the liver.

The liver was removed and a radiograph made. Figure IV demonstrates the neoplastic nodules, as negative areas which do not contain the thorium dioxide. Each nodule is surrounded by a positive area in which the reticulo-endothelial cells are situated and have engulfed the thorium dioxide particles.



Fig. IV. J. L. V. Radiograph of liver after autopsy.

Case No. 4. G. W., Hospital No. 42177. Admitted 12/12/31. Died 3/2/32. Colored male. Forty-three years of age. Diagnosis: Hypernephroma with generalized metastasis, or myeloma with generalized metastasis. Practically all of the bones showed areas of rarefaction. The differential diagnosis between the two conditions was not clear-cut, due to the fact that areas of rarefaction were noted in the vertebrae. He was given thorium dioxide solution in order to visualize the liver, roentgenographically, and to determine whether or not metastases were present therein. It was believed that if the liver showed no evidence of metastatic growth, the diagnosis of multiple myeloma would be strengthened and if metastatic growths were present, the more probable diagnosis of hypernephroma would be strengthened. He was given three doses, 25 c.c., each, of thorium dioxide solution. The liver is shown to be homogeneously opaque and no evidence of mottling being present, Figure V.



Fig. V. V. G. W. Multiple myeloma; liver shows evidence of mottling.

At no time were any untoward symptoms noted in the patient. For a while, his progressive cachexia and emaciation seemed lessened, but this was only temporary. At death, autopsy showed a diffuse generalized multiple myeloma in all of the bones. The liver and spleen showed no evidence of metastatic growth.

Case No. V: E. H. H., Hospital No. 40953. White male. Fifty-seven years of age. Admitted 11/30/31. Discharged 12/16/31. Diagnosis: Myelogenous leukemia. On admission, patient complained of swelling of abdomen and edema of lower extremities. On physical examination, a marked splenomegaly was present, extending down to the pelvic brim. Total white blood cells averaged 280,000 per cu. mm., 51 per cent myeloblasts and myelocytes. Total red cells averaged 3,065,000. He was given three doses of thorium dioxide solution, each dose 25 c.c. Radiographs, taken two days after the last injection, revealed opacity of the liver, but the spleen remained invisible, Figure VI. These tremendously enlarged spleens in myelogenous leukemia cannot be visualized by this method, due to the enormous infiltration and destruction of the reticulo-endothelial cells by the myeloid tissue and the consequent spreading of the few remaining cells by the diffuse tumefaction. Thus, relatively little thorium is present per volume of tissue in contrast to normal spleens, which have a full quota of reticulo-endothelial cells, properly situated.

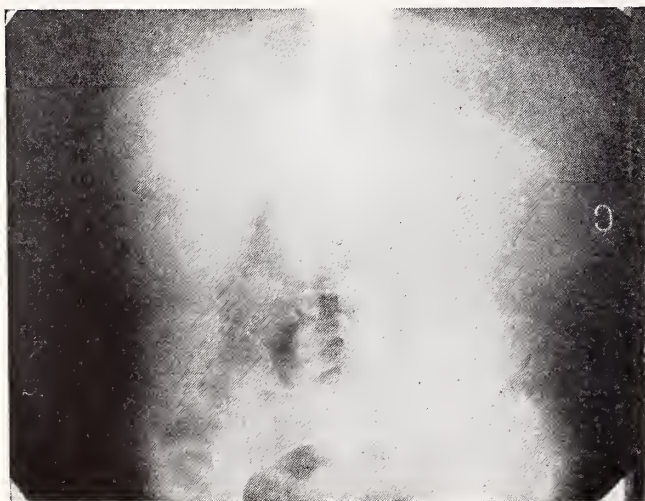


Fig. VI. E. H. H. Myelogenous leukemia; spleen only faintly visible.

This patient showed no evidence of any reaction at any time. He was given deep-ray therapy over his spleen and discharged 12/16/31. At the present time, he is able to attend the radiotherapy clinic and is much improved in health. His white blood cell count has diminished considerably. His spleen is rapidly diminishing in size and is about three-fourths the original size on admission.

Case No. VI: D. F., Hospital No. 4690. Admitted 2/11/32. Discharged 4/3/32. White male. Thirty-eight years of age. Diagnosis: Echinococcus cyst of the liver. Chief complaint: tumor of upper right quadrant of abdomen. Pa-

tient operated upon in 1924 in Walter Reed Hospital for a similar cyst in the dome of the liver. Due to occurrence of another cyst in the lower portion of the liver, he entered Charity Hospital for treatment. When first seen for attempted visualization, he had an icteric tint to his sclera and marked abdominal distention, having been operated on the day previously. At that time, a first-stage operation for hepatotomy was done, in order to cause the visceral and parietal peritoneal surfaces to become adherent and thus seal off the peritoneal cavity. The day following this preliminary procedure, he was given two doses of thorium dioxide solution, 25 c.c. each, two days apart, and radiographs were made twenty-four hours after the last injection. Figure VII shows the negative shadow (area of rarefaction) in



Fig. VII. D. F. Echinococcus cyst, lower right part of the liver.

the lower part of the right side of the liver, which is directly under the external tumefaction.

No untoward reactions were noted. A hepatotomy was done after radiographs were made, and the contents and cyst wall removed. Hooklets, daughter, cysts, etc., of *Taenia echinococcus* were found in the cyst contents. The patient is improved, his jaundice has disappeared, and at the time of discharge 4/3/32, he was able to walk around, although still having a drainage tube in the cyst cavity.

REACTIONS AND UNTOWARD CLINICAL EFFECTS

We have used this stabilized colloidal suspension of thorium dioxide in animals, rather extensively, in order to study various phases of reticulo-endothelial activity before administering it to the human. It would seem, from a review of the few cases here presented, that the thorium dioxide solution

is inert and may be given with relative impunity. This is not true. The comparatively small doses necessary for visualization used in these cases, we believe, reduces the danger of unfavorable results to a minimum and thus far, we have not encountered any severe reactions in the human cases. Our series is, as yet, too limited and further investigations are being carried out in a larger series, before it will be possible to draw any sweeping conclusions. Definite reactions to the drug have been noted by others. Stewart and co-workers⁶ reported such reactions as vomiting, which was manifested by three patients after the second injection. In one case of intra and extra-acinar type of liver cirrhosis, the patient had hematemesis from esophageal varices seven hours after the thorium dioxide solution was injected. It has been noted by Radt³ and others that in those cases in which the reticulo-endothelial cells have been destroyed, as for example, in cirrhosis of the liver and spleen, that there exists a tendency to manifest reactions following the injected thorium. This is probably due to the fact that the solution remains in the circulation a longer period of time than usual. The excretion of the injected thorium from the body takes place through the kidneys, gastro-intestinal tract and lungs.

EFFECTS OF TOXIC DOSES

The use of larger doses than is necessary is not without danger. For example, Shih and Jung,⁷ studying the effects of one or two large single doses of the solution, three to nine times the amount necessary for visualization in rabbits, have found that there is a diminution of the thrombocytic content of the blood with prolonged bleeding and clotting time. Thus, a tendency to hemorrhagic purpura and, in a few instances, actual hemorrhages into the organs were produced. Despite the fact that the manner of sacrificing the rabbits was not given, nor any control rabbits killed by the same method noted, the work is interesting, at least, from the standpoint

of suggested toxicity of the larger dosage used.

RADIO-ACTIVITY OF THORIUM DIOXIDE SOLUTION

Thorium is one of the lesser radio-active substances, and the thorium dioxide used in the particular solution under discussion has a definite, but minute radio-activity, although this has been too slight to cause any serious ill-effects in the tissues we examined microscopically. That there is a definite radio-activity of the thorium used, we have evidence of, from the results of radiologic examination of Umbrathor, a similar preparation, but which differs from the colloidal solution of thorium dioxide in the fact that it is not stabilized and precipitates when brought into contact with organic material. The Radium Institute of the Academy of Freiburg (quoted from Kadrnka⁸) found that 100 c.c. of Umbrathor, which has the same thorium dioxide content as the solution we used in this work, contains a quantity of radio-active substance, the gamma-ray equivalent of which is that of the gamma-rays of 1.24×10^{-6} gr. of radium. Thus, since approximately 40 c.c. is used in the average individual, the total gamma-ray equivalent is that of the gamma-rays of 0.496×10^{-6} gr. of radium.

Stewart and his associates⁵ found that in one case, the spleen after autopsy, when placed on a photographic plate for a day, contained enough radio-active substance to register an image on the plate, while control spleens were negative. We have endeavored to repeat this experiment, using highly sensitive photographic plates, as well as roentgen ray plates and have in no manner succeeded. We are, at present, investigating this problem in greater detail with spleens from both humans and animals and will report our findings at a later date.

SUMMARY AND CONCLUSIONS

1. Six clinical cases are presented, in which the method of roentgenographic visualization of the liver and spleen by means

of a stabilized colloidal suspension of thorium dioxide has aided in the differential diagnosis of certain tumors of the abdomen.

2. We are led to believe that the radioactivity of stabilized colloidal suspensions of thorium dioxide is too slight to cause any serious tissue damage in the dosage used.

3. Through proper selection of cases, dosage and mode of administration, it is possible to avoid unfavorable reactions.

4. Further investigations of previous work and more observations as regards toxicity and damage to cells after long periods should be made before the method is advocated for routine use.

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THE RAGWEED SITUATION IN THE SOUTHERN STATES

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The Mason and Dixon line cuts through the middle of the ragweed area of the United States. The variation in the time of the occurrence of the ragweed season and the great difference in its local severity in various parts of the South, as well as the great amount of data now available on the subject, justify special treatment of the southern situation. In this paper a general summary of conditions is supplemented by a discussion of local findings in the light of all available data.

DISTRIBUTION OF SPECIES

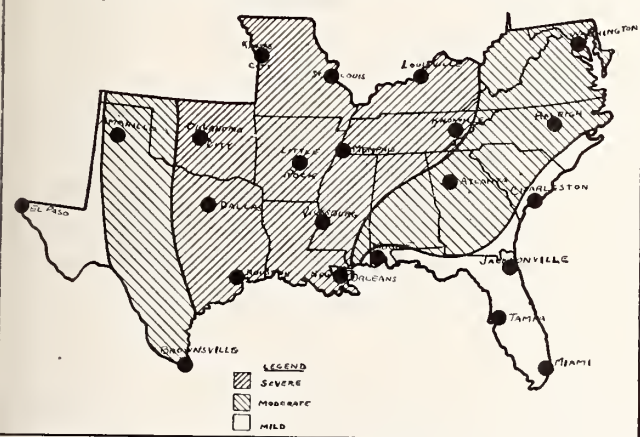
Out of the many species of ragweed growing in the South only two, short ragweed and giant ragweed, are of major importance. Except in West Texas and Florida, both are found throughout the area, but are more abundant in the rich agricultural lands of the Mississippi Valley. Extreme West Texas has insufficient rainfall for these two offenders, and most of the east coast and Florida are not particularly favorable for them, especially giant ragweed which is not found in profusion south of the Georgia line. Of the species of minor importance cocklebur is the most widely distributed. It is found in almost every part of the South. Marsh elder is common in moist low lands in the Mississippi Valley and Gulf region, and southern ragweed is very common on dry soil in and around the Ozark region. Western ragweed is found from the Mississippi Valley west but is abundant enough to be important only in the western and extreme southern part of Texas.

AIR RESEARCH

The method suggested by Dr. Blackley some sixty years ago, of determining the amount of pollen in the air by counting the number of granules falling on a unit area

*From the Biological Laboratories of Abbott Laboratories.

RAGWEED ZONES IN THE SOUTH



of oiled slide, has been found very useful in determining the potential distribution of ragweed pollen. Comparative pollen incidence in various localities and the dates of average onset, apex and termination of the resulting hay fever season are also best studied by this means.

During the past three seasons, I have had the cooperation of the United States Weather Bureau in making uniform slide exposures at weather stations throughout the country. All quantitative data embodied in this paper were obtained from the counting of the ragweed pollen found on these slides. In counting, no attempt was made to differentiate between various species of ragweed (*Ambrosiaceae*) pollen but it is certain that most of the pollen found was from the two common ragweeds.

TIME OF THE SEASON

In the northern states there is a very definite time for the ragweed pollen season, namely, about August 15 to September 25, with the apex about September 1. For the area included in this paper, these dates hold good only for points along the Mason and Dixon line. In central Oklahoma, the season begins about August 15 but does not reach a climax until the second week of September, then continues until the first or second week of October.

In northern Texas, we find the apex of the season still later, averaging about the third week of September, and at Houston about the first of October. Thus the fall pollen storm develops in the northern

states and sweeps down toward the Gulf like a "norther" at the rate of about twenty miles a day. The air is not entirely clear until November.

SEVERITY

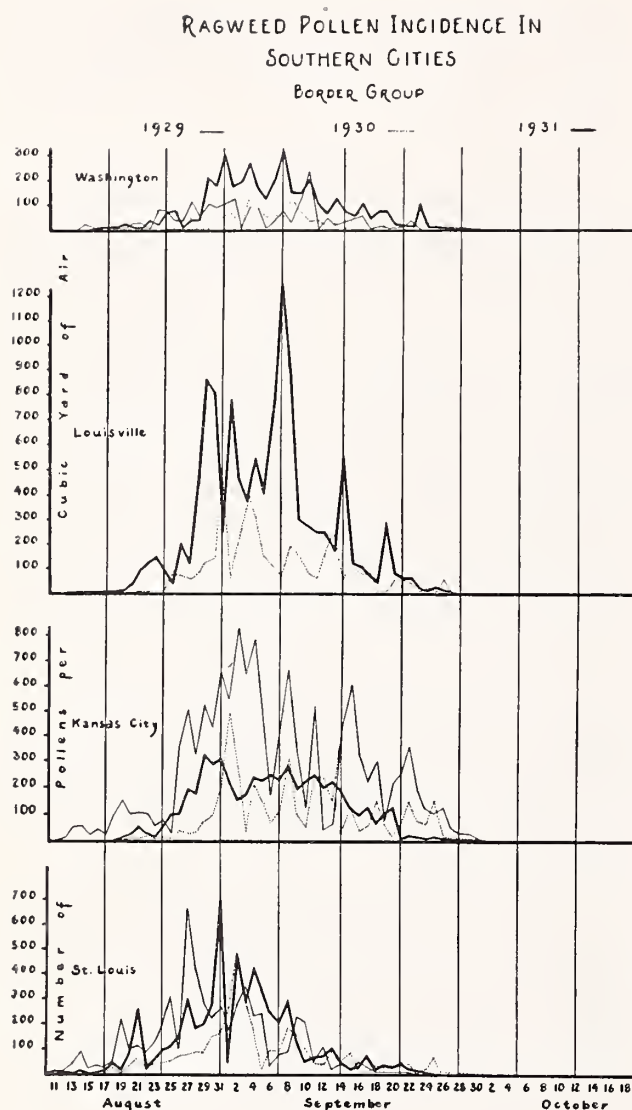
During the last three years, atmospheric contamination has been worse in Kentucky and Missouri than it has in any other part of the South. Several other states are capable of sharing this doubtful honor. Florida, however, is more fortunate as it has only about as much pollen in the air during a whole season as Missouri has in an average day. The ragweed pollen crop of 1929 in the southern states was much heavier than that of either of the two succeeding seasons. The nation-wide drought of 1930 resulted in a 50 per cent decrease of atmospheric pollen throughout the South as well as the North. While there was more pollen in 1931 than in 1930, serious local shortages of rainfall west of the Mississippi still kept the totals 25 per cent under those of 1929.

In general, atmospheric ragweed pollen incidence is about one-half as heavy in the southern as in the northern states. This is due in part to a predominance of clayey and sandy soils unsuitable for ragweed, and may be partly due to differences in methods of agriculture. In the wheat belt ragweeds produce a luxuriant crop on wheat fields after harvest, but cotton culture keeps all weeds well under control.

BORDER GROUP

Washington, D. C.: The ragweed season in Washington is very similar to that of New York and Philadelphia, both in time and in character. Only short ragweed and giant ragweed are concerned. The record for 1931 is more than twice as high as that of either of the two previous years. Similar increases were experienced in all other eastern cities the past season. The influence of favorable weather was also felt in Raleigh, Atlanta, Knoxville and Louisville.

Louisville: The total amount of pollen encountered in Louisville in 1931 was almost three times the amount encountered



in 1930. This is explained by the difference in rainfall during July. In 1931 the weather was particularly favorable for summer crops in this locality; high winds and clear weather during the pollen season also aided in the unusual record of the past season. This mark will probably not be exceeded at this station but it has been exceeded at Kansas City and, under favorable conditions, could be equaled or exceeded at Memphis, St. Louis or Oklahoma City.

Kansas City: In 1929 the Kansas City record was the heaviest for any part of the United States. During the past two seasons Missouri has suffered droughts which have cut down the pollen figures considerably. Under normal conditions the season starts very promptly between

August 10th and 15th and lasts through September. Thus the graph is typical of the northern states rather than the southern. It will be noticed that there is a marked difference in the character of the latter part of the ragweed season in Kansas City and St. Louis. Why production should continue so much higher during the second and third weeks of September in Kansas City than in St. Louis, I am unable to explain. The bulk of the pollen during this period is produced by short ragweed. Kansas City is perhaps the only point in the southern states where burweed marsh elder is found in quantity. Even here the proportion of its pollen appearing on the slides is very small. Southern ragweed and marsh elder are common Missouri plants south and east of Kansas City.

St. Louis: This station is in the midst of the area where southern ragweed is abundant. Just how much this species of ragweed contributes to the total pollen crop is uncertain, but as its season of bloom is short and totals are not particularly high for St. Louis, its influence is probably comparatively unimportant. (See above paragraph.)

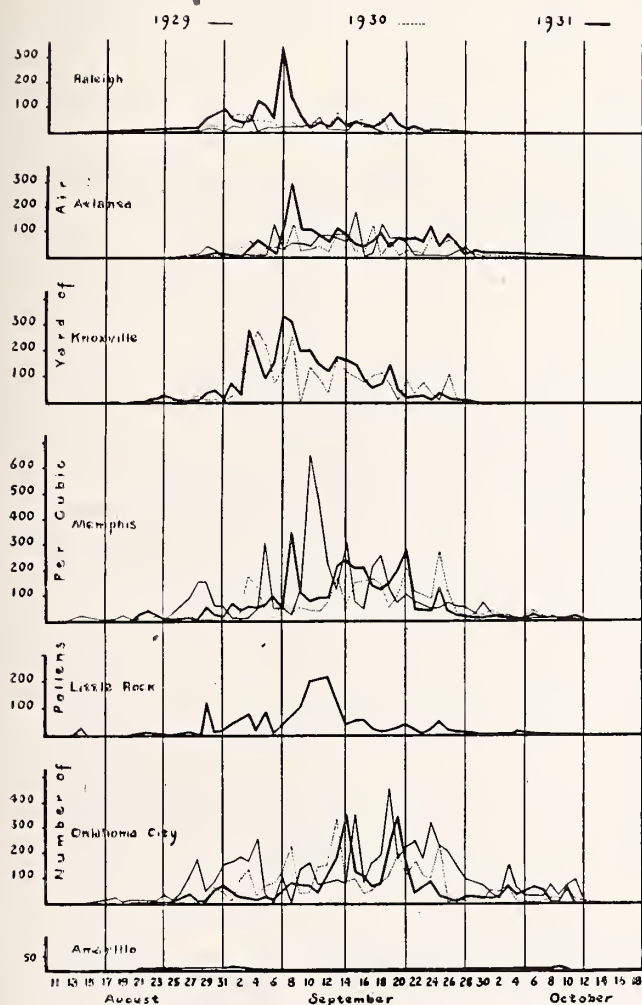
CENTRAL GROUP

Raleigh: Raleigh is the only station maintained in the tidewater region. By comparing its record with that of Atlanta, we may conclude that it is typical for the seaboard states except on the immediate coast. (See Charleston.)

Atlanta: The active part of the ragweed season in Atlanta lasts only about thirty days, but small amounts of pollen continue to appear on the slides until the middle of October. During the three years study rainfall has been considerably below normal. It is entirely possible that with more favorable weather conditions, the record would be much heavier than the average here shown.

Knoxville: Two studies at this point reveal conditions very similar to those found in Memphis. The season is a few

RAGWEED POLLEN INCIDENCE IN
SOUTHERN CITIES
CENTRAL GROUP



days earlier than at Atlanta as would be expected.

Memphis: The Memphis graph is typical of the central group of stations shown on Figure 3. All these cities at about the 35th parallel have a moderately heavy season of about eight or nine weeks, with the apex during the second week of September.

Little Rock: The single record for this station is probably lower than the average, due to lack of summer rainfall.

Oklahoma City: The bulk of fall pollen in Oklahoma City comes from short and giant ragweed, although western ragweed and marsh elder are fairly common. Much higher records than those here shown have been obtained in this vicinity, but it has

been several years since conditions have been favorable for summer crops. These three records are all probably below average.

Amarillo: The slides were exposed in Amarillo for the first time in 1931 and results were very meagre. It must be considered that 1931 was a very dry year in the Panhandle. As fall plowing in this locality is done immediately after harvest, wheat fields in this section are not allowed to grow up to ragweed as is the case in the central states. This may account in part for the low figures. The most important ragweed of the district is western ragweed.

SOUTH-CENTRAL GROUP

Charleston: With only one study in Charleston it is unsafe to draw conclusions. It is quite certain, however, that Charleston is outside the heavy ragweed area. Only an occasional stray specimen of giant ragweed is found in this locality. Toxic amounts of pollen appeared on the slides at irregular intervals through August and September. Certainly the low record the past season cannot be charged to inadequate rainfall during the summer. The results compare well with previous studies at Jacksonville and Miami, and with records for this season for Tampa and Mobile. Thus it seems that from midway down the Atlantic Coast to Mobile conditions along the coast are not favorable for ragweed.

Vicksburg: The Vicksburg curve is very similar to that of New Orleans. Similar soil and agricultural conditions may account for the resemblance.

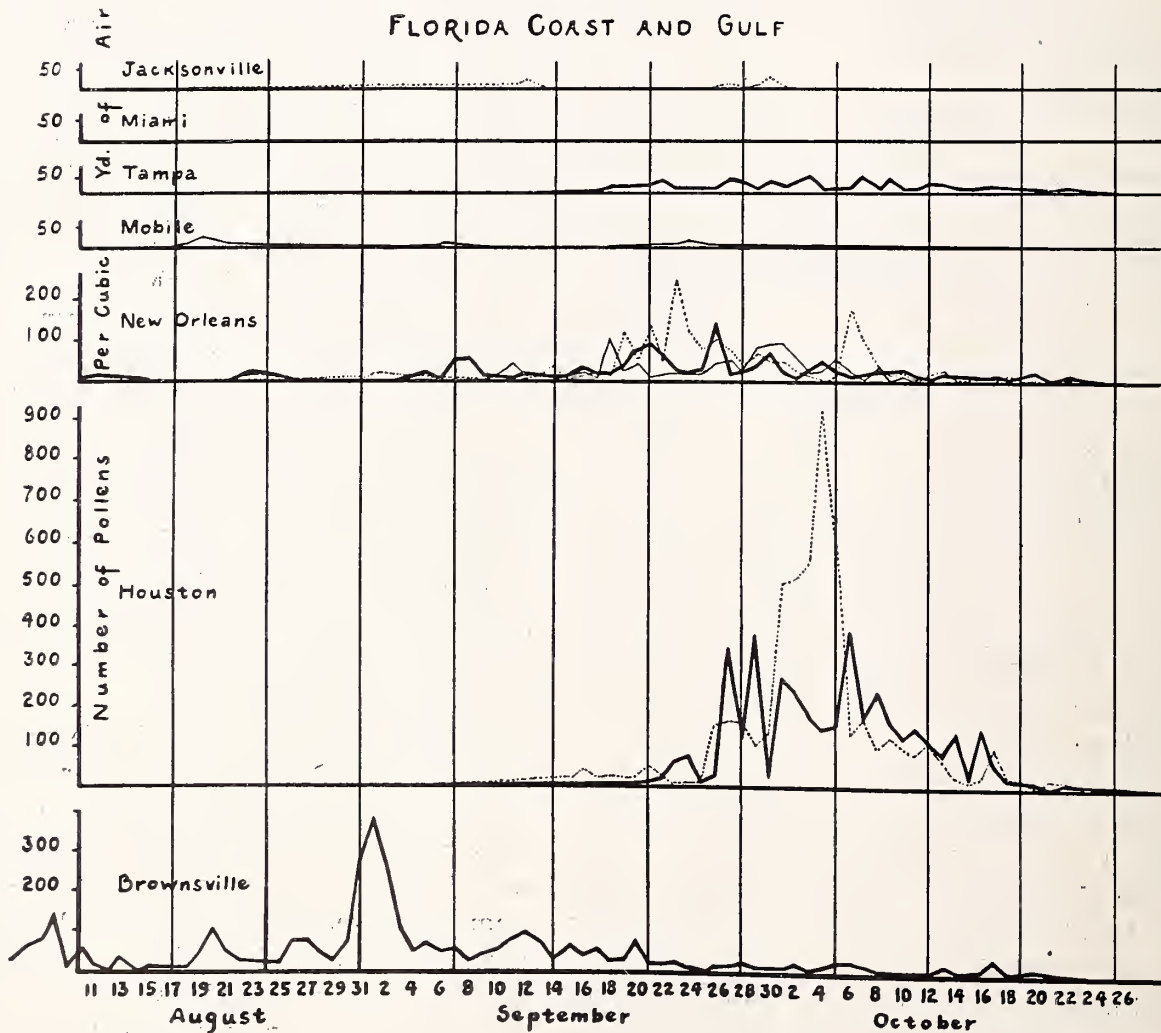
Dallas: Dallas is the only Texas station for which data are available for the three seasons. The onset and termination of the season seem to be determined, but the actual yearly apex varies greatly with immediate weather conditions. As in Oklahoma City and Memphis, protection is necessary for ragweed hay-fever sufferers for almost two months. While the two common ragweeds are of major importance

RAGWEED POLLEN INCIDENCE IN SOUTHERN CITIES

SOUTH-CENTRAL GROUP



FLORIDA COAST AND GULF



in this vicinity, marsh elder is also very plentiful in the Trinity River bottom. In this part of Texas is also found a narrow-leaved species of marsh elder (*Iva angustifolia*).

El Paso: The figures were so very low for El Paso in 1929 that it was not considered worth while to continue the investigation. Reports of local field observation have confirmed the air findings. El Paso is outside the ragweed pollen area.

Jacksonville: In the vicinity of Jacksonville no giant ragweed is found. Short ragweed is not abundant, though individual plants grow to considerable size. A very small amount of a seaside species of marsh elder (*Iva imbricaria*), which grows in sandy places, and another species of marsh elder (*Iva microcephalata*), which is quite common on pine barrens, are not heavy pollen producers. There seems to be just enough ragweed in this locality to ruin it as a hayfever resort. (See remarks concerning Charleston.)

Miami: While a small amount of short ragweed may be found in the rich cultivated soil of the glades in the vicinity of Miami, the character of most of the land is such that no member of the ragweed family can become a widespread menace. Repeated exposures by the United States Weather Bureau and by physicians interested in allergy have failed to find more than a few occasional pollen grains in the air.

Tampa: Tampa is the only city in the Florida peninsula that has been shown to have even moderate amounts of ragweed pollen in the air. If the 1931 record is typical, we may say that it is a consistent season, lasting from the middle of September into the middle of October, during which a maximum of 50 granules of pollen per cubic yard of air may be encountered on favorable days.

Mobile: Considering the proximity of Mobile to New Orleans, I cannot explain why the record for Mobile is so low. Subsequent studies must be made before any conclusions can be drawn. If the record

is typical, Mobile should be regarded as a hay fever resort. The explanation must lie in the character of the soil.

New Orleans: Just why the season should come earlier in New Orleans than in Houston is not evident, but it is quite certain that the heavy average rainfall in New Orleans encourages ragweed to develop more leaves than pollen. This would account for its smaller crop.

Houston: The past two seasons are not necessarily typical. In 1927, pollen appeared in the air in Houston by September 1st and the apex came on September 15th. The black soil in the vicinity of Houston is particularly favorable for ragweed. Here we have encountered the heaviest atmospheric contamination of any place south of Louisville.

Brownsville: The results obtained during the past season in Brownsville disclose a situation differing widely from that of any other portion of the South. Pollen begins to appear in the air in toxic quantities as early as the third week of July and continues at a moderate level until the last of October, with an apex about September 1st. The long season is probably due to pollens from a sub-tropical species of ragweed (*Ambrosia hispida*) and western ragweed. Short and giant ragweed are not abundant. Thus in point of duration, the season in the extreme tip of Texas offers the most serious local problem encountered anywhere in the United States.

CHRONIC APPENDICITIS*

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The subject of "Chronic Appendicitis" has so often repeated itself in the history of medicine that it may be said to assume periodic importance. Within the last decade its literature has continued to grow until it has become most voluminous. It

*Read before the Section on Radiology at the Sixty-fifth Annual Session of the Mississippi State Medical Association, Jackson, April 13, 1932.

has received varied discussion by internists, surgeons and pathologists, as well as by roentgenologists. Its diagnosis has been severely criticized by some internists, and pathologists such as Aschoff and others question its existence. The surgeon, according to Hertzler, has accepted the epigram that gastric distress associated with right iliac pain or tenderness spells appendicitis. Though the significance of this syndrome of symptoms has been modified in the surgical eye, several years ago the American College of Surgeons was responsible for a dictum sent to the various hospitals of the country entitled, "A Model History of Chronic Appendicitis." This no doubt did irreparable harm in that many more cases have been mistakenly diagnosed, and operated upon needlessly. Appendices have been deliberately removed for the sole purpose of influencing the course of duodenal ulcer. The prophecy that patients with a digestive complaint will appeal directly to the surgeon for relief has undoubtedly come true. Tenderness in response to a hasty jab in the right iliac region with a history of indigestion seems sufficient to many surgeons to justify operation. The value of roentgen diagnosis in appendicitis is a disputed and debatable question, and is seemingly reduced to an absurdity. The radiologist is accused of having fantastic conceptions of what roentgen signs denote inflammation of the appendix. He is considered an accessory to surgical crime, or to the "furor operandi." Bettmann of Cincinnati states that investigation reveals that sixty per cent of the cases who have had an unsuccessful appendectomy, received no adequate study before the operation was decided upon. He continues that statistics compiled from the various hospitals of this country show that the number of cases so operated upon are on the increase, many of them because of mistaken diagnoses, that forty per cent of the patients are not relieved of their complaint, twelve per cent are made distinctly worse by operation, and there is

an average mortality of two per cent. The experience of White of Boston substantiates this statement. Carnett and Boles of Philadelphia have written several articles on chronic pseudo-appendicitis due to intercostal neuralgia, and in the last one, it seems that they regard chronic appendicitis as only "one element in a generalized condition which includes the habitus of the patient, the entire gastro-intestinal tract, especially the colon, and principally the sensory nerves in the abdominal wall." In their opinion "appendiceal dyspepsia" is not a clearly defined entity, and offers no opportunity for diagnosis. Rohdenberg of the Lenox Hill Hospital, New York City, concludes that the disease is due to a lesion of the sympathetic nervous system, and that it is not restricted to the appendix alone, as the lymphocytic infiltration about the Meissner ganglia of the appendix is also seen in the ganglia in the fundus of the gall-bladder, and is probably general to the splanchnic system. He offers this finding as an explanation for the reflex gastric symptoms, and the fact that removal of the appendix alone, or with the gall-bladder, does not always relieve the symptoms of the disease. Many internists explain the unsuccessful appendectomy by showing that the diseased appendix has taught the stomach reflex bad habits, such as pyloro-spasm and slow emptying, and that it requires time for nature to correct these.

From the foregoing it is evident that the literature is replete with chaotic controversy as to what is chronic appendicitis, and what constitutes the authentic signs of a pathologic appendix. Out of this maelstrom of conflicting ideas and opinions it behooves the roentgenologist to find the truth by making consistent examinations of appendices that will redound to his credit, and allow him to feel equal to his responsibility that a diagnosis of "diseased appendix" means "take it out." Let us not be abettors to surgical intervention, but with the means of examination at our command

abide by standardized roentgen signs of clinical inflammation of the vermiform process. I make a most urgent plea that the roentgen diagnostic signs of appendiceal disease be assiduously studied, and it is with this purpose in mind that this paper is presented.

In the light of our present day knowledge, it must be said that the leading pathologists are all agreed that the term "chronic appendicitis" is a poor one, and should be confined to those rare cases of diseased appendix due to tuberculosis or malignant change. Microscopically, practically all appendices show lymphocytic infiltration and minor degrees of fibrosis with obliteration of the lumen, which are either evolutionary or degenerative, and develop with the age of the patient. This metamorphosis is naturally to be expected in a rudimentary and vestigial structure, which has no known function. At operation many fibrous appendices are found in cases without clinical symptoms of appendicitis. Roentgenology offers valuable aid in detecting those producing symptoms of disease. It is not unwise to emphasize its importance, and to stress certain points in diagnosis already familiar to most radiologists.

IMPORTANCE OF CLINICAL HISTORY

While there are cases of chronic disease of the appendix of pyogenic etiology, these are comparatively few. The large majority of erroneously named chronic appendices are really those the result of recurrent inflammation. The resulting chronic changes such as massive fibrosis and adhesions so contort the organ that it is recognized as grossly pathologic at operation. Carefully detailed clinical histories will testify to recurrent attacks of indigestion, and many of them accompanied by definite lower right quadrant discomfort. The ultimate conclusion should be "recurrent" and not "chronic" appendicitis. In the female the attacks may occur co-incidentally with the menstrual period due to the associated vascular congestion aggravating the inflammatory changes present in the

appendix. This search or inquiry into the history is very essential, and should be gone into thoroughly before formulating any opinion. In other words, it should be made the basis of our examination. According to Case, "census of two thousand consecutive admissions to the Battle Creek Sanitarium showed that twenty-five per cent of the patients had had an appendectomy based on a diagnosis of 'chronic' appendicitis without relief of symptoms. A few had been operated upon after one or more attacks with complete relief in nearly all of the cases." In the absence of history relating to recurrent lower right quadrant symptoms, we should be exceedingly cautious to eliminate chronic cholecystitis, gastric and duodenal ulcer, duodenitis, chronic duodenal ileus, diverticulitis of the small intestine, and colon disease of any character, before stating that the patient has chronic appendiceal disease. For this reason, roentgenology of the appendix should be done only as a component part of a complete gastro-intestinal study. Whereas the viscus may be visibilized by the barium enema alone, it cannot be studied intelligently by this procedure alone. The latter should only supplement the intensive gastro-intestinal examination. It is true that any of the diseases mentioned, especially chronic cholecystitis, may be associated with an inflamed appendix, but it must be emphasized that this association is with the more common recurrent appendix. The relatively rare chronic appendix produces the gaseous distension of cholecystitis, but this occurs several hours post-prandial instead of shortly after meals. Occasionally, cases with symptoms of peptic ulcer eventually prove to be due to a diseased appendix of the chronic type. Also, this disease has been known to be the etiologic factor in fevers of obscure origin. No doubt the appendix, or the so-called "abdominal tonsil," may play the role of the pharyngeal tonsil in that its lymph-follicles are vulnerable to bacterial invasion, which infection may excite pyrexia of doubtful cause.

Gray of Richmond, working after the theory of Dr. McGuire Newton, has reported many cases of "cyclic vomiting," and other gastro-intestinal conditions in children, due to chronic inflammation of the appendix, in which the symptoms were relieved by appendectomy.

DIRECT ROENTGEN SIGNS

Besides the clinical history of the case under examination the direct roentgen signs are important. These are tenderness, fixation, distortion, and lastly delayed emptying. In order that the appendix may be intelligently examined, it must first be visualized. Depending on the completeness of embryological descent and rotation of the cecum, it may lie anywhere from the right costal margin to the pelvis minor, or be transposed into the lower left abdominal quadrant. It may be mesial or lateral to the cecum itself, or lie in a sub-cecal or retroperitoneal position. Roentgen examination has shown the inconstancy of McBurney's point, and has disproved the absolute value of the point for certain palpation. The appendix departs from this point in fourteen per cent of individuals. The opaque meal best adapted to gastro-intestinal study consists of eight ounces by weight of barium sulphate with enough of a palatable adhesive vehicle to make eight ounces by volume. This permits of an accurate examination of the stomach and duodenum. The patient is then allowed an eight ounce glass of water to add volume to the bolus before he returns for the intestinal investigation. Six to twenty-four hours after the barium is administered, with the aid of the fluoroscope the appendix can usually be seen by moving the patient into different positions and manipulating the caput cecum. Although the viscus is again sought for after the barium enema, the latter does not lend itself well to scientific examination of the organ for several reasons. The physiologic filling and emptying of the appendix is impossible. Often it is difficult to fill its lumen due to spasm of the ceco-colic

sphincter, and if it does fill, it is usually distorted even under normal conditions by pressure of the bariumized clyisma, which may also distend the caecum to the extent that the appendix assumes a sub-cecal position. Some roentgenologists depend on the barium enema for the visualization and examination of the appendix, and even make a practice of using this in studying acute conditions of the right lower quadrant. In elective cases it only permits the one examination of the appendix, which is usually impractical, and it does not give us any information relative to lesions outside of the colon, which may be causing symptoms. In acute cases I only mention it to condemn its use. Under such circumstances it is a hazardous procedure, as increasing the tension in the cecum, or introducing barium into an inflamed appendix, may bring about rupture of the latter.

Tenderness: If the appendix cannot be visualized by conservative and logical methods, we must not be content to elicit tenderness over the cecum. This will often lead to grave errors in diagnosis. Tenderness is very essential to a diagnosis of pathologic appendix, but to be diagnostic it must be specifically localized and circumscribed to a visualized appendix, move with that organ, and should be absent in each of the areas from which it is displaced. Furthermore, such tenderness must be found with the abdominal muscles relaxed, and subside when the muscles are tensed, showing that the soreness is of visceral, and not of parietal origin. Parietal tenderness falls into the category of epicritic sensation, which may be due to a costo-lumbar neuralgia, which Carnett describes. However, this type of tenderness is diffuse, and follows the course of the superficial nerve distribution of the parts. Pain referred to the appendix produced by pressure over other parts of the abdomen is important if the point of maximum intensity coincides with the viscus itself. Vice-versa, pain referred to other parts of the abdomen produced by pressure over the visualized

appendix is diagnostic if associated with localized tenderness confined to the organ itself. Palpation of the appendix should always be performed by making pressure from tip toward cecum so that no stretching is brought to bear on the cecum, which may be the site of some intrinsic lesion, and tenderness excited in this by the increased tension would be misleading. If we will keep these factors in mind when examining for tenderness as a sign of disease, we will steer wide of the many other causes of pain and tenderness in the lower right quadrant. Some of these are tabetic crises, spinal cord tumors, spinal arthritis, ureteral calculus, ureteral kinks, pyelitis, perinephric infection, muscle-strain, inguinal hernia, nematode worms in the cecum, ovarian disease, ectopic pregnancy, pelvic tumors in general, and commonly, according to Hawkins, visceroptosis associated with neurasthenia. Any of these may produce entero-spasm of terminal ileum and colon with constant pain. This functional spasm is also emphasized by Case, who states that in a large percentage of instances of lower right quadrant pain, the real cause lies in the distal colon and rectum, such as adhesions of the pelvic loop, pressure of pelvic tumors, carcinoma, diverticulitis, hemorrhoids, anal fissures, rectal ulcers and proctitis. I might suggest, however, that the pain of these latter diseases does not occur in attacks, but is more or less constant, which fact is of very material aid in making a differential diagnosis.

Fixation: This sign of an existing diseased condition is inter-related to an immobile position and distortion of the appendix. Under fluroscopic vision the normal organ is freely movable. Constancy of position means the presence of an inflammatory process, active or quiescent, and if found tender, it must be active. Fixation is sought for in the same manner that we elicit tenderness, by palpation from tip toward cecum, as adhesions more often occur at the tip. If it is attached to the parietal peritoneum, the peritoneal tug so

induced will occasion pain. The longer the appendix the easier it is to demonstrate its immobility. Abnormal position does not necessarily mean fixation, unless the appendage cannot be displaced from the point of observation. If the caecum is freely mobile, we are more convinced if the appendix does not move with it. If the cecum is high and fixed, and the appendix distorted, this finding is of value. Quite often it is difficult to determine if fixation really exists. This occurs in the examination of obese individuals with thick abdominal walls, when the pressure of the palpating hand will not displace the appendix, and we must resort to moving the patient into different positions to note the effect of the pull of the cecum on the organ. Again, in the case of the pelvic appendix, palpatory displacement may be impossible, unless the cecum can be delivered out of the pelvis. The Trendelenburg position is essential to satisfactory examination under such circumstances. Moreover, the possibility of fixation of the appendix to a freely moving cecum or ileum must not be overlooked. The fixed relation of the viscus to either of the two will furnish us with the desired information.

Distortion: Changes in the shape of the appendix may be of either extra- or intra-luminal origin. Fixation with adhesions at one or several points usually produces angulation, kinking or coiling. On the other hand, inflammatory changes in the lymphoid structure of its walls may alter the contour or outline of the lumen to a marked degree, producing constrictions, or even obliteration. However, in order that intra-luminal distortion without fixation may be diagnostic of disease, it must be constant, and accompanied by localized tenderness.

Delayed emptying: Filling, or lack of filling of the appendix, is not diagnostic. Extreme views have been held on this point. Filling is a passive process, whereas emptying, which is normally complete

in eighteen to thirty-six hours, is the result of peristaltic contraction of the intrinsic muscles of the organ. Baetjer states that the frequency of visualization varies from thirty-five to ninety per cent in normal cases, and this is much dependent on the frequency of observations made, as it is without a doubt that the appendix fills and empties several times during an examination. Skinner claims that filling after thirty years of age is significant. However, this conclusion, or that which is more plausible, that chronic inflammatory changes should obliterate rather than dilate the lumen, are problematic, and cannot be depended on in an embryologic structure undergoing evolutionary changes of varying degree in different individuals. On the other hand, slow or delayed emptying according to Le Wald, if the cecum is empty, and occurring after the seventh day, is exceedingly suspicious. White takes a more conservative view, and states that if the cecum be empty and in its normal position, retention in the appendix beyond the second day is strongly suggestive of disease, and this finding combined with tenderness is diagnostic.

There are no other direct signs worthy of note. Segmentation or beading, size, and the presence of concretions cannot be relied upon. Beading is often due to inspissation of the barium mass in the lumen, peristaltic waves, or to the outline of the lymph-follicles projecting through the mucosa of the appendix. It may be filled with concretions, or fecoliths, and yet never give any symptoms unless these should totally occlude the lumen, and prevent drainage. The size of the viscus again brings up the question of evolutionary changes peculiar to different patients.

INDIRECT ROENTGEN SIGNS

The indirect signs of a diseased appendix, such as gastric residues, pyloro-spasm, duodenal and ileac stasis, spastic cecum, and incompetency of the ileo-cecal valve, are the least important, because they are

commonly associated with other intra-abdominal pathology. Delay in emptying of the stomach is more usually seen in lesions of the upper abdomen, and is the exception in those of the lower bowel, unless definite obstruction is present. If gastric retention is found, it is usually a small fractional residue, and is commonly accompanied by the symptom of nausea. While pyloro-spasm is very frequently a concomitant finding with a diseased appendix, it may be noted in numerous diseases both extra- as well as intra-abdominal. Duodenal stasis is most often found in conjunction with cholecystitis, or secondary to duodenal or gastric ulcer. Ileal stasis has been too much emphasized as a sign of inflammation of the appendix. To the contrary, hypermotility through both ileum and colon is frequently found, though this may be due to an associated achylia, gall-bladder disease, or duodenal ulcer. The delay of over six hours in entering the cecum, or beyond nine hours for complete emptying of the ileum, may be due to entero-spasm from many causes previously enumerated. The functional disturbance in the ileum sometimes encountered in appendiceal disease consists in hypertonus and isolated loops of barium in the terminal segment with delay of the bolus in entering the colon, but complete emptying of the ileum by the end of the ninth hour. Stasis which occurs after this period, and most often up to the twelfth hour, is never diagnostic of inflammation of the appendix, but is frequently the sequel of appendectomy, and is the direct cause of the post-operative pain and tenderness in the lower right quadrant. Bettmann states that this is true in fully one-third of the cases. A twenty-four hour ileac retention is practically always significant of organic disease of the colon, and incompetency of the ileo-cecal valve is usually secondary to the resulting colonic stasis, rather than an inflamed appendix. A spastic or deformed cecum, often associated with ileal stasis, is commonly a sign of colonic lesions either proximal or distal.

and is not necessarily indicative of disease of its vermiform appendage.

SUMMARY

1. Due to countless errors in diagnosis, no organ is so often removed without cause, and a plea is made for the standardization of the roentgen signs of a pathologic appendix.

2. Microscopic change alone fails to denote the appendix that causes clinical symptoms. Gross appearance and the future status of the patient's health are the best criteria in determining if the viscus be diseased. Mallory in four thousand autopsies at the Boston City Hospital found the appendix normal in the gross in ninety-five per cent. There were none of the signs present, so easily recognized by roentgen examination.

3. The clinical history must be made the basis of our conclusions in the majority of the cases, if the curative results of operation are to be made certain. Without a history of recurrent attacks of indigestion the diagnosis is dubious in most instances, and most of the patients will not receive clinical benefit from appendectomy. As a result of this decision, most of our diagnoses should read "recurrent" rather than "chronic" appendicitis.

4. The relatively rare cases of true chronic appendicitis are usually considered of malignant or tuberculous etiology, but may be of pyogenic origin. The symptomatology is always atypical. There may be gaseous distension several hours postprandial, or symptoms of gastric ulcer. Cryptogenic infection as a cause of obscure fever may reside in this type of appendix.

5. Of the roentgen signs which are essential to accuracy in establishing a diagnosis, the "specific" tenderness described is of primary importance. Fixation in its relation to immobile position and distortion must be looked for. Slow, or delayed emptying in association with an evacuated cecum of normal site is worthy of consideration.

6. In those cases where the roentgen-

ologist has been guided by the foregoing principles of examination, the results have been so satisfactory that I have no hesitancy in recommending the procedure.

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ACUTE CONDITIONS OF THE FEMALE PELVIS AND LOWER ABDOMEN*

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In the average office one or more women can be found daily seeking relief for some form of discomfort in the lower abdomen. The hospitals hold well their percentage of female admissions, and the operating rooms are busy "correcting" the evils of

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pelvic injury or disease. There is a general tendency to advise operation too hastily, and not consider the simpler measures which would be much safer for the patient, and the end result more effective. You recall, no doubt, cases of salpingitis presenting a definite surgical picture, that after a period of physical rest regain both normal structure and function. It behooves us then to weigh the evidence carefully, before advising a procedure that often destroys all function of the reproductive system, and precipitates the distressing symptoms of a premature menopause.

It is to be remembered that the female peritoneal cavity, one of the largest lymphatic spaces of the body, connects directly with the exterior contaminated skin surface, which accounts for the frequency of infection in the lower abdomen. These conditions often present a very acute picture; pain, marked tenderness, abdominal resistance and often a frightening septic pulse. The question may frequently arise, is this a case for immediate surgical intervention, or should she be sent to bed with absolute physiological rest and careful supervision. Acute salpingitis is capable of producing just such a hazard in which surgery would be nothing short of disastrous. In these cases the best judgment of the practitioner is taxed and the most careful diagnostic skill is demanded. Statistics of the larger clinics prove that almost, if not all, of the acute salpingitis cases will "cool" and a number entirely recover. Dr. Miller has stated that in many years of practice only twice has he seen an infected tube rupture. It is rarely necessary to explore and an exploration in the presence of the above mentioned disease means added injury.

In speaking of these conditions as will be outlined later, some are very easy to definitely recognize, while some are extremely difficult. You will agree that a most careful examination is necessary, but may I encourage a painstaking review of the history, the onset and previous illnesses, which oftentimes offers even more than

what you might feel digitally. Both a vaginal and rectal examination should be made and a catheterized specimen of urine examined.

The acute conditions frequently encountered are listed as follows: Acute infections, concealed hemorrhage, strangulation of an organ or new growth, bowel obstruction, ureteral calculus or stricture; rupture or perforation of viscus; uterine abortion and retention of urine.

There are a few symptoms and signs that are fairly common to the entire group that I wish to mention before taking up several of them in a more detailed way. Pain is always the predominant symptom, and desirably so; but does not in itself constitute excuse enough to advise any type of operation. It must be accompanied with other signs and symptoms, fever, circulatory changes and other than a normal blood picture. Probably the most important sign would be the expression so well written upon the face and body of the patient. The severity of the condition is often from this picture quickly adjudged. A stupid, flushed, cyanotic expression of severe toxemia; and a waxy, pallid one in hemorrhage. The position of the patient and even condition of the bed covers offer helpful information. If the lesion be within the peritoneal cavity and acute, the patient will be invariably found upon her back with knees flexed. She objects to being moved and never fails to tell you "please do not shake the bed." The passage of a ureteral stone causes excruciating pain but is rarely accompanied by the above immobility.

These are a few of the general signs and symptoms. I would like now to discuss several of the above group of conditions separately.

ACUTE INFECTION OF THE FALLOPIAN TUBES OR APPENDIX

Errors in diagnosis between appendicitis and pelvic diseases are not uncommon. The proximity of the right adnexa, and ceco-appendicular region often with relative frequency have reciprocal lesions. The distinc-

tion between the infection of the two is a very important one to make, for it is imperative that the inflamed appendix be removed immediately, while to open the abdomen for an acute salpingitis spells disaster.

Acute salpingitis is usually bilateral and speaking generally one can differentiate from appendicitis in this, and by the history of the onset. There being in acute inflammation of the pelvis a preliminary vulvo-vaginal irritation, abortion, puerperal infection, or where gonorrhea is suspected a stained smear of the vaginal or cervical discharges will be diagnostic. The patient as a rule does not appear so ill as in appendicitis, the temperature usually higher, but the pulse rate not correspondingly disturbed. The face may be seen flushed, but the expression not nearly so apprehensive as in acute appendiceal disease. The abdominal tenderness and rigidity are more widespread, covering usually the entire lower half. There may be distention but nausea and vomiting are not constant features.

Contrasting with the typical attack of appendicitis we find a different clinical picture, and, the history as you notice helps us again. The first symptom is pain and felt in the epigastric region or about the umbilicus, later localizing in the right lower quadrant. Nausea is a fairly constant sign, and often vomiting. Tenderness over the McBurney point and a definite muscular spasm or rigidity of the oblique and right rectus muscle. Fever of lower degree and a fast septic pulse. The leukocyte count is moderately increased ten to fifteen thousand with the neutrophils greatly predominating. This represents the picture of the inflammatory type and distinctly differs from acute salpingitis. The other type of appendicitis as emphasized by Dr. Ochsner is the obstructive condition, fecal concretions blocking the circulation, almost sudden gangrene and perforation.

I have mentioned muscular spasm and rigidity as fairly constant signs in appen-

dicular disease, but may I remind you also that it is quite possible if the onset be accompanied by a chill, pneumonia could be guilty instead of the appendix.

CONCEALED HEMORRHAGE

Heading the list is a ruptured tubal pregnancy, but severe bleeding may arise from a ruptured uterus of varicocele, or even a ruptured Graafian follicle.

The rupture of a typical ectopic is fairly easily recognized. There being a sudden onset with sharp lancinating pain, a mass rapidly increasing in size, air hunger, pallor, a fast thready pulse, cold, clammy extremities and a falling blood pressure. In the slow bleeding cases, however, the patient escapes this severe shock and the diagnosis is much more difficult to make. They may not appear very ill, complaining of pain at intervals of hours or even days apart. In sixty to seventy per cent of these cases we find menstrual irregularities making again careful history taking a great aid to diagnosis. Any change from the normal in the menstruation of a woman of the child bearing age should make us at least think of an ectopic pregnancy.

The latter type is usually seen late after development of the mass which may be limited to one fornix but more often fills the entire cul-de-sac. At this stage they are found somewhat wasted, anemic and running a low grade temperature. Upon examination the tender boggy mass can be outlined and the gentlest movement of the cervix causes excruciating pain. The patient complains of painful defecation and worries quite a little over the constant vaginal discharge of blood. It is quite difficult sometimes to differentiate this condition from salpingitis. The history of previous attacks of pelvic pain which is bilateral in most cases, the finding of thickened diseased Bartholin's glands and in addition a leucorrhoeal discharge speaks fairly definitely that the patient has had a Neisser infection probably with extension to the Fallopian tubes, but the problem is to decide whether a woman with an acute pain in one

side of the lower abdomen is at that moment suffering with salpingitis or having an intraperitoneal hemorrhage from an ectopic pregnancy. There can be no objection, if in doubt, to do an exploratory colpotomy which at once settles the matter. If blood is found, open the abdomen and remove the tube.

The laboratory findings are of course helpful but not definitely diagnostic. A few years ago it was hopeful that a falling or low hemoglobin index would reveal a concealed hemorrhage, but this is not always true. Dunn and Wynne have shown that the hemoglobin does not reach its lowest point until forty-eight to seventy-two hours after the bleeding has started. The leukocyte count is variable but usually runs around twenty thousand. The leukocytes continue to rise so long as active bleeding is going on, and in the absence of infection quickly drops when the hemorrhage ceases. Farrar in a suspected ectopic pregnancy advises a leukocyte count every two hours. She has shown that the fluctuation of this count as the intraperitoneal hemorrhage starts and stops is fairly characteristic of this condition and claims that by this means she can tell whether an immediate operation is indicated.

STRANGULATION OF AN ORGAN OR NEOPLASM

In this condition the lesion is a definite thrombosis, most usually a twisted pedicle. The pediculated fibromyomata of the uterus or medium sized ovarian cysts, being most common. The careful examination discovers the mass or growth and frequently the patient has been aware of its presence before the illness. The pain is most typically colic-like and very severe, and with the onset definitely located over the tumor surface. The pulse rate is not disturbed and the patient is found without temperature. Later the thrombosis become more severe and we see a picture of an acute peritonitis with a very rigid abdomen. The temperature rises, the pulse becomes septic and there is usually a reflex vomiting, the result of strangury and colon infection.

CONCERNING BOWEL OBSTRUCTION

We need first to be assured that the hernial orifices are clear. In cases of intussusception we have the characteristic bloody mucus discharge from the bowel and very soon the ileo-cecal tumor can be felt. We see this condition most commonly in childhood or adolescence. Volvulus occurs in the older subjects, usually a left sided lesion, and can also be outlined by examination. The symptoms of obstruction are as a rule abdominal cramps or colic with definite quiet intervals, constipation and after short progression an antiperistalsis which results in vomiting.

STONE OR STRICTURE IN THE URETER

The presence of a stone or stricture in the ureter may give rise to abdominal pain, distention and even nausea and vomiting. The presence of pain with its distribution down the thigh, into the scrotum or urethra, the bloody urine and frequent micturition are diagnostic signs, but more often we are deprived of these earmarks.

It has been said that the symptoms due to ureteral stricture or stone have undoubtedly been the cause of more ill-directed abdominal and pelvic surgery than can be ascribed to any other disease. This sad truth is confirmed when we study the findings of Mazer, Dabney or Turlington in which they have shown that in the neighborhood of forty per cent of their stricture cases have abdominal scars, operation performed with the hope of relieving discomfort that still persists.

It is very true that there is a close relationship existing between diseases of the urinary tract and the symptoms referable to the gastro-intestinal canal. If there exists from the history or the clinical findings even one clue referable to the genito-urinary system it would be well to have a careful investigation from the urological standpoint.

The art of surgery and medical therapy has reached quite a degree of perfection of which we are very proud, but we must continue to exercise greater care and judg-

ment in the diagnostic side of our work. It is quite a problem sometimes to determine whether the symptoms are attributable to one or a combination of lesions and to advise the patient just the right procedure for a restoration of health.

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IMPORTANT FACTS REGARDING THE PREVENTION AND TREATMENT OF DIPHTHERIA.*

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The lesions that are characteristic of diphtheria are caused chiefly by the direct irritant action of the soluble toxin produced by the bacilli. The endotoxin of the substance of the bacilli is also poisonous, but to a less degree. The local irritant action is characterized by pseudomembranous inflammation. The effect of the absorbed toxin is shown by scattered lesions throughout the body, particularly in the highly specialized tissues as the heart, nerves, and kidneys. Complicating secondary infections of the lungs and other structures are usually caused by accompanying streptococci and other pathogenic bacteria.

We have at our disposal certain bacteriological methods for determining all cases and carriers of diphtheria. Positive Loeffler cultures are significant, but negative results have no value. The presence of Klebs-Loeffler bacilli is absolute proof.

With suspected laryngeal diphtheria, repeated bacteriological examinations may be necessary to establish the diagnosis.

Negative cultures may be due to the fact that an antiseptic had been used on the fauces a short time before taking the swab, or that the membrane had not been touched by the swab. In mixed infections, a very careful examination of the film is necessary.

The bacillus of diphtheria has a comparatively slow early growth, while the organisms frequently found in the flora of the mouth grow rapidly at the start and may overgrow the specific organisms. For this reason, the absence of diphtheria bacilli at the end of twelve hours is not conclusive and a later examination should be made.

As a rule, one should never wait for a bacteriological report in cases of clinical diphtheria before commencing treatment, for every hour lost means more toxin disseminated with its resulting damage.

Among diphtheria carriers, the large majority are temporary carriers and missed cases, who get rid of the bacilli within a relatively short time. A certain percentage, however, remain chronic carriers. These chronic diphtheria carriers are particularly dangerous because of the difficulty of freeing them of their organisms. In all cases where the problem of prolonged isolation arises, a virulence test should be made, since the majority of the morphological-positive carriers harbor non-virulent organisms.

According to investigations made by Frost, carriers tend to develop carriers and presumably immunity, while cases have a much greater tendency to develop new cases. These observations pointing to the innocuousness of the individual carrier as compared with the individual cases do not, of course, rule out the carrier as the principal source of recognized diphtheria.

The removal of diphtheria bacilli from chronic carriers is usually fraught with great difficulty. Antiseptics, formaldehyde, dichloramine-T, various essential oils, iodine, and glycerine have all been tried; at-

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tempts have been made to drive out the organisms by implantation of staphylococcus aureus and B. bulgaricus. Sprays of pyocyanin have also been tried, but contradictory results have been obtained with all of these methods. Success is most likely to attend attempts to establish as normal a condition of the nasal and pharyngeal membranes as possible, by cleansing with mild alkaline or saline gargles, preceded by correction of any anatomical abnormalities that may exist, plus removal of tonsils and adenoids. This last procedure is most promising, and most likely to shorten the carrier state.

TREATMENT

The two cardinal points in the treatment of this disease are, first, the early use of antitoxin, and, second, rest in bed.

Specific therapy in diphtheria is, of course, the main thing in clinical control. It must be remembered here as in all other forms of specific therapy that success depends as much upon the time at which the diagnosis is made as it does upon the manner of treatment. Therefore, in speaking of specific therapy, it is important to emphasize the necessity for early diagnosis. It is in this particular that the responsibility of the physician is greatest, and every severe sore throat in a child should be immediately cultured and, though not as imperative in adults, it is not a bad rule to culture all throats by the Loeffler method. The procedure is easy—it consumes no time and requires so little skill that even in outlying districts the physician can easily carry out the steps himself with a simple equipment.

In order to understand the practical principles of diphtheria antitoxin treatment, it is necessary for the physician to remember chiefly two basic facts. One is the observation by Schick and others that, even though diphtheria toxin does not enter so rapidly into combination with the tissues of the nervous system as does tetanus, it, nevertheless, is bound to do so to some extent and that the antitoxin probably does not reach poison that is already combined

with tissue elements. It is probably that the injury once done is irretrievable, at least to a great extent, and that the antitoxin is chiefly effective against the circulating poison before such cellular attachment has been established.

The second basic point is the one brought out by the measurements of Henderson Smith and others which show that antitoxin subcutaneously injected is slowly absorbed and reaches its maximum concentration in the blood not much before seventy-two hours after injection, and intramuscularly in about twenty-four hours.

Large doses of antitoxin should be given early in order to decrease the mortality rate. Kolmer gives some very interesting statistics from his Philadelphia experience, comparing some thirteen thousand cases over the period from 1904 to 1913. The fatality rates per one hundred corresponding to the day of the disease on which antitoxin was begun are as follows:

First day	0.4
Second	5.0
Third	8.3
Fourth	10.7
Fifth	11.2
Sixth	14.2
After sixth	13.1

Fitzgerald presents some interesting figures comparing fatality rates in individuals treated at home and those treated in hospitals, for the period 1913-1919. A modification of his table is given below:

DEATHS FROM DIPHTHERIA IN TORONTO
(1913-1919)

Year	Number treated		Corrected fatality rate (%)	
	Hospital	Home	Hospital	Home
1913	569	326	3.0	15.0
1914	601	272	6.0	14.3
1915	537	209	3.9	20.0
1916	889	365	3.6	21.0
1917	1,124	321	0.9	20.0
1918	1,015	158	3.9	35.0
1919	1,327	805	5.4	12.0

The marked difference between fatality rates is very striking and affords sufficient basis for the increasing demand for adequate hospital facilities.

The difference in these rates would seem to justify the opinion that the treatment of the disease is better placed in the hands of the hospital than left to the varying treatment of practicing physicians.

The deductions to be made from these considerations are, first, that early diagnosis must be made, that it is essential to get the antitoxin in as early as possible, and that when the injection is made, it is better to give a sufficient amount at the first dose than to dribble it along in insufficient amounts with intervals of many hours between doses. These observations impose upon the physician great responsibilities of judgment, since in cases seen late in the disease, with very severe symptoms of intoxication, it may be necessary to resort to intramuscular or intravenous injections of the antitoxin.

The dosage of antitoxin must vary according to severity of the case, the stage at which it is seen, and the age of the patient. In severe cases, twenty thousand to thirty thousand units should be injected.

If intravenous injection is resorted to, precautions against the occurrence of anaphylaxis must, of course, be taken, but in view of the relatively slight danger of death from horse-serum injections in man, the risk of anaphylaxis in cases in which intravenous treatment is actually indicated is probably much less than the risk of delaying the introduction of antitoxin into the blood. If skin tests can be done beforehand, they should be done. They take very little time and give the physician a signal of possible danger. When such intravenous injections are actually made in sensitive subjects, it seems advisable to dilute the serum fifty per cent with sterile salt solution at body temperature, in order to render slow injection easier so that the injection of each cubic centimeter may occupy at least one minute.

Before giving an injection of any preparation of horse serum, the physician should assure himself on two points: First, that the patient is not asthmatic or

suffering from any other form of allergy; second, that he has never had a previous injection of antiserum.

If there is any reason to suspect that the patient is sensitized to horse serum, a test should be made—a drop or two of a 1:10 dilution of the serum to be used or of normal horse serum being placed just under the outer layer of the skin. The diluent for the serum should be physiologic salt solution. A central wheal, surrounded by an area of redness more or less intense and extensive, indicates the fact of serum sensitization and its degree; this reaction will appear within fifteen minutes if it is to appear at all. A negative reaction indicates that the patient will tolerate the serum well, but not necessarily that he will be free from all liability to later serum reaction.

In any case of actual or suspected allergy to horse serum, it is well to give the patient an injection of 0.5 c.c. of adrenalin chloride solution, 1:1000, immediately before or coincidentally with the administration of the serum, for its sustaining effect upon the heart and general circulation.

In case of anaphylactic shock following the administration of a prophylactic or therapeutic injection of antiserum, a full dose (1 c.c.) of adrenalin chloride solution, 1:1000, should be promptly injected intramuscularly or subcutaneously. For intravenous injection the adrenalin must be very freely diluted.

Next to antitoxin, rest in bed is the most important factor in the treatment of diphtheria. The pathological change much to be feared is fatty degeneration of the cardiac muscle. It is highly probable that this occurs in all cases where toxic symptoms, however slight, are present. It certainly occurs in all severe cases and it sets in early in the disease.

So long as any exudation is present, local treatment should be carried out with a view of removing it, but if the patient vehemently resists, as is often the case with

children, it should be omitted, because the struggles of the patient are harmful to him. Gargling or swabbing the throat with warm water, normal salt solution, saturated solution of boracic acid may be used. Solutions that are so strongly bactericidal as to be able to destroy the bacilli *in situ* do more harm than good, being as inimical to the mucous membrane as to the micro-organisms.

Isolation of patients should be carried out until they have been demonstrated to be free from the infection. Two or preferably more consecutive daily cultures from the throat and nose, as well as any other area in which diphtheria bacilli might be present, should be secured before release.

On releasing the patient, it is customary to give him a thorough bath and dress him in clean clothes. Everything in the isolation room should be disinfected by heating or thoroughly washing with water in which some antiseptic solution has been added (cresol, lysol, corrosive sublimate, and the like, are all suitable) or by prolonged exposure to sunlight and airing. It is not probable, however, that organisms will survive in the room longer than in the patient's tissues, but such is possible.

In carrying out the isolation precautions, care should be used that as little infection as possible gets about the room. This may be done by care in collecting the nasal and other infected secretions on pieces of paper and burning them at once, or putting them into paper bags. In the event of coughing or sneezing, the patient should hold a handkerchief or piece of cloth to the face. Infected objects should not be spread about more than necessary; concomitant disinfection is the important procedure.

PREVENTION

In recent years, there has come into use a practical method of testing for immunity to diphtheria, known as the Schick test, and also a method for developing in children a permanent immunity to diphtheria by the injection of diphtheria toxin-antitoxin mixture, or toxoid.

The Schick test consists in the intracutaneous injection of a small amount of diluted diphtheria toxin, a positive reaction being shown by a red macule, indicating that the subject tested had not enough antitoxin in his blood to neutralize the injected toxin, or to ward off an attack of the disease. In this test, therefore, a reaction indicates non-immunity.

Since pseudo-reactions may occur as a result of the proteins of the toxin broth as well as of the toxin, each test should be controlled by the injection at a corresponding site on the other arm, of the same amount of similarly diluted toxin which has been indicated by heating to 75° C. for ten minutes. Pseudo-reactions appear earlier and do not last as long as do true reactions.

The favorable age for active immunization is from six months to six years. In older children and in adults, a considerable proportion of pseudo-reactions to the Schick test occur, which offer difficulty in interpretation. With the corresponding greater constitutional reactions following the injection of toxin-antitoxin mixture, in this group we have an additional reason for immunization early in life.

Susceptibility to diphtheria is so frequent in children under six years of age that the preliminary Schick test may be omitted in their case. Six months after the first series of injections, another Schick test should be performed and the few who have not developed by that time, an immunity indicated by a negative reaction should receive a second series of injections with the toxin-antitoxin mixture, or toxoid.

Diphtheria toxoid was first applied to the immunization of humans by Ramon of the Pasteur Institute in 1923. The only protein constituents of toxoid are derived from the meat and peptone used in the broth, together with the products of metabolism of the diphtheria bacillus. It contains no serum of any kind and can, therefore, be given without fear of sensitizing to a later therapeutic dose of serum. Toxoid is very stable; the expiration date is now eighteen

months from the date of manufacture, and data are accumulating which may justify the extension of this period. Freezing does not seem to change it, and no physical or chemical treatment yet applied has succeeded in restoring any degree of toxicity.

As with all new products, doses of various sizes and to be given at different intervals have been suggested. Most manufacturers in the United States supply the material in packages containing two doses of 1.0 c.c. each and recommend an interval of from three to four weeks between doses. Since immunity depends upon the presence of diphtheria antitoxin in the blood of the subject, and as the formation of antitoxin is a slow process, better results should be obtained by using the longer interval.

The question of dosage and interval between doses will, no doubt, work itself out without difficulty as more and more of the material is used by different workers. Two doses with the thirty day interval certainly will produce better immunity than three doses of toxin-antitoxin mixture given at intervals of one week.

The only obstacle in the way of the universal use of toxoids is the tendency to cause local and general reactions in older children. These reactions are allergic in nature and all are agreed that they are only unpleasant and never dangerous. The best way to meet this situation is to immunize all children before they are old enough for such reactions to occur. Practically all young children give absolutely no local or general reaction, the trauma of the injection being all that can be seen. These are the individuals most susceptible to diphtheria, and it is in this group that any prophylactic measure finds its greatest usefulness.

Older children and adults may be immunized with toxoid, but it is good practice to test for sensitiveness to the diphtheria proteins before the immunizing injections are begun.

DISCUSSION

Dr. R. E. Wilson (Greenville): We have had presented a very comprehensive paper on all the

known facts concerning the disease of diphtheria. I shall attempt to discuss only a few points with reference to prevention and treatment of this disease. We have in the immunization against diphtheria a process on a par with the immunity against small-pox, differing only in the fact that the technic of administration is more simple, and the discomfort to the patient is less than in the other condition. However, we should remember that there is no immunizing agent that is 100 per cent perfect. Lowenstein states in a discussion of the various values of the immunizing agents that the primary test for immunity depends on the exposure of the individual to the disease. Occasionally we find a patient who has had toxin, antitoxin or toxoid, and who has subsequently had a negative Schick reaction, develop diphtheria. Such a condition can be explained on the ground that either the immunizing agent was inert, or the Schick material was inert. However, such occurrences are rare indeed, and in no way argue against our most enthusiastic efforts toward 100 per cent immunization.

The essayist discusses the intravenous use of antitoxin. In my opinion there is no doubt that the use of antitoxin intravenously in cases of laryngeal diphtheria often precludes the necessity of tracheotomy. Dr. W. H. Park of the New York City Board of Health states that antitoxin given intravenously reaches its maximum concentration in the tissues within twelve hours and, as stated, given subcutaneously it reaches its maximum concentration probably within seventy-two hours. In seventy-two hours most cases of laryngeal diphtheria untreated are beyond hope. A great many of them who are seen in the comparatively early stages can pull through 12 to 24 hours—anyway until the intravenous antitoxin has become effective.

The question of anaphylaxis must be considered in giving antitoxin intravenously. In my own practice where intravenous antitoxin is indicated I give one-half the dose subcutaneously and wait 30 minutes; if no anaphylactic symptoms have appeared I unhesitatingly give the remaining half dose intravenously. I have had no disastrous results from this procedure. I have had some reaction due to the intravenous injections, which probably would not have occurred with subcutaneous injections.

There is one other feature of the disease I wish to introduce in this discussion if I may, and that is the advisability of administering the so-called prophylactic doses of antitoxin in individuals who are exposed to diphtheria. Personally I feel that if these individuals have the advantage of close observation that it is not only unnecessary but inadvisable to give them the prophylactic dose of antitoxin.

Dr. L. W. Long (Jackson): The Doctor's paper was very comprehensive and covered quite a lot of territory, and leaves only a few points to be stressed and not much open for discussion.

I have come to feel that the discussion of diphtheria should occupy the same place in the medical society that the discussion of appendicitis occupied, that is there should be a paper read and discussed each year until such time as the public can become educated as well as the medical minds refreshed on this important topic. I think we all know that we have a disease that theoretically should be eradicated because we have the means of preventing and curing it. With these given facts then we should go to work and produce better results in the future even than we have in the past.

I am sure we all agree with the doctor that all cases even in doubt should be treated with antitoxin as early as seen and not wait for a diagnosis. I believe that every case should have at least 20,000 units of antitoxin with at least one-half of this in the veins and the balance in the muscle. The severity of the disease as well as the age of the patient should govern us as to an increase of this amount, but I think 20,000 units should be enough. Too little antitoxin can do much harm, too much can do none. Every case should be given 1/10 cc. of antitoxin in the skin before the antitoxin itself is administered into the veins, and a period of 15 minutes allowed to elapse before the second dose is given.

Before a case of diphtheria is released I believe that there should be obtained at least three successive negative cultures in order to be very sure that there is no possibility of the case spreading disease. I believe that toxoid should be used with no hesitancy in infants and young children because the reactions that occur are so few that I disregard them and they correct themselves in a short time without any treatment.

It is very interesting to me that during the month of February of this year we had in Hinds County four cases of diphtheria reported with four deaths. All of these cases received substantial adequate treatment and all could have been prevented before, that is theoretically. The strain of diphtheria that we encountered must have been very virile and I know of no better argument for immunity of every individual than this particular instance. I enjoyed the doctor's paper.

Dr. N. C. Womack (Jackson): I enjoyed the paper and the discussion very much. Very little progress has been made in treating diphtheria since the discovery of antitoxin except from the standpoint of immunization. We still have too many cases of diphtheria, and it isn't, as many of us think, to the poorer class of people, or the people who are less informed that we are to preach

the doctrine of immunization. It is the better class of people that I have in mind. I have in mind a mother with three children, all of the age that should be immunized. She does not have it done because she doesn't believe in it, and no amount of argument has been able to convert her. It is criminal not to immunize. Only recently I saw a beautiful little baby—some of the doctors that live here know about the case—that faded out, like a cut flower, with malignant diphtheria. This mother had lost her opportunity to save the child, and not because she had not been told. So much for immunity.

Nineteen hundred and thirty-one was probably the year of more fatalities relatively, in the percentage column, from diphtheria than any year since 1921. The doctor spoke of four deaths in Hinds County, and I winced because I had one of them—malignant diphtheria. If they are not treated with large doses of antitoxin the first day, one has very little opportunity to stop it. I think we should go to the trouble to see if they are sensitive to horse serum, and desensitize them if necessary. Recently there were eight cases of malignant diphtheria reported with six deaths. The two that recovered were given arsphenamine a short time after each dose of antitoxin was given. The theory is that arsphenamine unlocks the union between the cell and the diphtheria toxin, and, therefore, increases the efficiency of the antitoxin. In some cases of malignant diphtheria there are certain characteristics of the membrane that lead one to believe that it is more than a diphtheritic membrane. In some cases the organism of Vincent's angina has been isolated. In those cases one can understand why arsphenamine is a help. One other point to be considered in the frequency of diphtheria, is the length of time that one is a carrier after having had the disease. One of the members of our group demonstrated several years ago that seventy-six and two-tenths per cent of children who had previously had diphtheria were still carriers at the time the tonsillar crips were examined. One case in particular had had diphtheria at the age of five, and at the age of thirty-six the tonsils were removed, sectioned and cultured, demonstrating the organism. In the meantime he had lost one child at five weeks of age with diphtheria, another had had the disease, and his wife had had nasal diphtheria. Any child that has had diphtheria, without tonsils subsequently removed, should be considered as a potential carrier.

Dr. W. H. Frizell (Brookhaven): There is one point in this discussion that has not been brought out. You spoke of so many cases receiving early treatment and going on dying. Dr. Long referred to four cases in Jackson, who all died. I would like to ask Dr. Long what strata of society were

those children in—were they among the poor and needy, or among the more intelligent and better class?

Dr. Long: They were among the middle class.

Dr. Frizell: We have a very effective all-time health department in my county. We have a diligent doctor there and a nurse. They have besought these people time and time again, and I do my level best and have for over 20 years, as a part-time officer, trying to drill into the people the necessity of these things. It will go in one ear and out the other. Do it later—and you go on and these children take it and they have nobody to blame but themselves. It is too late. But what I want to say is this—so many times these cases come up in indigent children, and I want to impress this point—you can take children out of the upper classes, intelligent people who do not feed their children right—they let them follow the dictates of their own palate—they do not have a sufficient immunity against any disease. They are more susceptible to catarrhal disease, diseases of the air passages, and one thing I want to impress upon you all is that the majority of you are health officers, some all-time, and some part-time, and you are clothed with ample authority, and I am speaking now for the State Board of Health, we wish that you all, each individual, if you do not have your own inspector, inspect every depository for biologics that is in your territory. Go through it and if their biologics are not kept at the right degree, mark the packages—have every last one of them condemned and thrown in the ashes. I am speaking advisedly. No longer than this past winter we had quite a bit of diphtheria and I had three cases in my own practice in a family that was offered this treatment and offered it three times and they would not take it—ignored it. I gave 20,000 units three times to one child, which child did improve. Another child came in. They got their biologics from another place and it did not have any effect on the child. I went back there to see about it. The biologics were kept in one of these little glass cases with a little lump of ice in the middle of the lower part of that glass case. The proprietor was keeping them in refrigeration, he said. I sent Ware, our inspector, after him, and I do not think you are going to find any biologics in Brookhaven that are not kept at the right temperature. I gave him to understand thoroughly that they must be kept cold, and I want you all to watch that and you won't find so much ineffectiveness.

Dr. Robert A. Strong (New Orleans): I was very much interested in the discussion and I thought that I might sit back here and listen. Nevertheless, I appreciate your invitation, Mr. Chairman, to take part. I want to take this

opportunity to endorse what the Doctor has just said. If you do not keep your biologicals properly refrigerated you are not going to get accurate results therapeutically. On the other hand, some precaution is necessary to prevent too low a temperature. Especially is this so in toxin-antitoxin. In Boston about three years ago, forty students in a preparatory school were very seriously affected following the administration of toxin-antitoxin. An inquiry by a very competent board which included Bela Schick and Dr. Park of the New York City Health Department found that the reactions were due to the fact that the toxin-antitoxin used, had been exposed to very low temperature while in transit. This caused a dissociation of the toxin from its neutralizing agent, the antitoxin. The result was that these students received very much more than the conventional one-tenth minimum lethal dose which the present day toxin-antitoxin never exceeds.

I think my friend, Dr. Womack, has brought out the keynote of the diphtheria problem. Our chief responsibility is to prevent. There is no disease in which we have available greater facilities for prevention than we have in diphtheria. Yet, it is still not used to the extent which some day I think it will be. I have just had the privilege of taking part in a symposium in New Orleans which was held jointly by the Health Department and the Orleans Parish Medical Society for the purpose of discussing ways and means of lowering the mortality and morbidity of diphtheria in the City of New Orleans.

Some of the conclusions which were reached represent, I think, the consensus of opinion at the present time. They are, that all children excepting those showing decided allergic tendencies should be given the benefit of active immunization against diphtheria during the pre-school age (6 months to 6 years) without a preliminary Schick test. The best means of accomplishing this is by the administration of not less than 2 or not more than 3 1-cc. doses of diphtheria toxoid (Ramon anatoxin) at intervals of 3 weeks. Children of the school age and adults show more local and general reactions to the bacterial protein of toxoid, so that an intradermal test for sensitiveness should be performed before administering the immunizing injections. If evidence of sensitiveness appears within 3 days after the intradermal test, the doses of toxoid should be altered and given as follows: 0.1, 0.25, 0.5, 1, and 1 cc. of diphtheria toxoid at intervals of one week, instead of 3 weeks. The great susceptibility of the pre-school child justifies the elimination of the preliminary Schick test, but it is desirable to perform a preliminary test on older children, especially in urban communities where the oppor-

tunity is favorable for acquiring active immunity from exposure to attenuated infections. Rural children show a greater susceptibility to diphtheria, as indicated by more Schick positives, than city children. It is believed that toxoid will soon replace toxin-antitoxin as an immunizing agent. Toxoid is from 20 to 30 per cent more effective, even in only 2 doses, it contains no serum to sensitize to later therapeutic sera, it contains no free toxin, it is more stable, and is not affected by freezing. Toxin-antitoxin should be protected against freezing, which is especially likely with modern electrical refrigeration. Finally, in the newer conception of diphtheria immunization, it is believed that many of the difficulties which occur in the developmental period of every new departure have been overcome. While the whole procedure of active immunization has been greatly simplified, it is still necessary to use a certain amount of discrimination, and the application of the methods should remain in the hands of physicians, and should not be entrusted to their subordinates.

Let me emphasize again that I believe, if we will put forth every effort to immunize the pre-school child, we can not only eliminate diphtheria entirely as it has been done in cities like Auburn, New York, Grand Rapids, Michigan and Pueblo, Colorado, but we can greatly reduce the deaths which occur at an early age. If you will look at your mortality and morbidity statistics, you will find the greatest number of deaths between 6 months and 6 years. If you can stop it, then you won't have any trouble with older children.

Dr. F. Michael Smith (Vicksburg): The old Prophet said "there is nothing new under the sun" and I do not think Tennyson meant to contradict that when he said:

"Through the ages one increasing purpose runs,
And the thoughts of men are widened with the
process of the suns."

But should I be called upon to go back to the general practice of medicine there is one change that I would make that would be NEW to what I followed when I was a general practitioner or what has been followed by the men in the various localities where I have served during the past twelve years. When I would be called upon to look after an expectant mother and when I had delivered her I would tell her that the fee I was charging when paid would entitle her baby to protection to diphtheria when it was between six months and one year of age, to protection against smallpox some time before it was eighteen months old. In this way I would get ahead of these health officers who in following out preventive medicine and who in fully discharging their duties as public servants must of necessity perform this

service free. I speak this as a health officer who has oftentimes felt keenly what he considers the unjust criticism of the practitioner or members of this profession that he has honored and revered from childhood. In our work at the Warren County Health Department we are the keeper of vital statistics. The births of all children of our city and county are registered with us and a permanent record is made. At the age of one year we send a birthday letter to each child born in our county advising the parents of this child that it should now be protected against diphtheria and smallpox if it has not already been protected, and we further advise that if it is their preference, to take it to their family physician, if not, to bring it to the health department for immunization. We feel that the incidence of diphtheria can be reduced only by an early immunization of our babies.

Dr. Milne (closing): Dr. Womack in his discussion brought out the point that a certain number of cases of diphtheria occur in those individuals who have had a previous negative Schick test. In a series of 3100 primary Schick tests made in one of our counties, it was found that thirty-six when tested the second time gave a positive reaction. This may be due to the fact that on the first occasion the material may not have been properly injected or sufficient dose given, or that the material was not potent. Although this is only a small per cent that react in this way I do not think it should be disregarded in assuring the parents that the child is protected after one negative Schick test.

In diphtheria protection one of the great difficulties is to have the parents take their children to their physician, or the health department, for the immunization. We will have to educate the parents and if we keep this educational program going vigorously and persistently, we will gradually attain the goal. From the records and surveys made of various health departments, I find that it takes from two to three years after the onset of the health department to get the majority of the people of all classes sufficiently interested to have their children protected against this disease. This follows the old saying—"The squeaking wheel gets the grease." If we talk frequently and convincingly enough the parents will finally feel that the responsibility regarding this disease rests on their shoulders. In regard to carriers: It has been said that the entire population is a carrier of diphtheria at some time or another about every sixteen years. These carriers may be either temporary or chronic. As a rule healthy individuals exposed to cases or carriers of this disease do not keep the organisms more than a few days or a few weeks depending to some extent upon the condition of the mucous membranes.

The treatment of these carriers has been taken up in the paper.

Dr. Strong brought out the point of proper care of biologics in regard to temperature. This is a very important matter and a great deal of attention should be given to this.

In regard to a reaction from toxoid in the older age group, it has been my observation that these reactions are more uncomfortable than they are dangerous.

TONSILLECTOMY BY FRACTIONAL ELECTROCOAGULATION:

ADVANTAGES AND DISADVANTAGES OF DIATHERMY IN OTOLARYNGOLOGY.*

GEORGE B. COLLIER, M. D.†

NEW ORLEANS.

My idea in submitting a paper on this subject is due to the fact that I wish to bring before you the possibilities of this method.

There is a growing interest on this subject, especially among the laity, and as in numerous other things they expect the impossible.

I have never been able to find any method, and especially this one, that is perfect or "fool proof." Still I wish to say that this method has a very definite place in our specialty although surgery will continue to be the method of choice in the majority of cases. Quoting from the recent paper of Dr. Dillinger, one of the foremost advocates of diathermy, he says: "Why do we wish to supplant the present surgical tonsillectomy which has received such universal approval and has been used for so many years?" He believes the entire profession recognizes that there is no operation which has so many complications when they do happen as does the surgical tonsillectomy. I wish to go on record as being opposed to this statement. I do not believe there is any reason for any serious complications when it is done properly by

a competent throat surgeon. And my personal preference for my patients, if there is no serious contra-indication, is surgical tonsillectomy under general anesthesia with an experienced anesthetist and a good suction apparatus on a table that can be broken so the head is lower than the shoulders and in this way minimize the possibility of a lung abscess. If the patient is properly prepared and the operator experienced, under the above methods the tonsil is completely enucleated at one sitting and the hemorrhage checked.

Again we inspect the adenoid area by actual vision which is very important in quite a few adults and especially those who are having difficulty in hearing because much more often than we realize there are remains of adenoid tissue in adults. It is my firm conviction that this should always be completely removed in order that a catarrhal otitis media or catarrhal deafness may not result, or if already present help the condition and improve the hearing.

Now what are the advantages of diathermy? I said previously that it has a certain definite need in the armamentarium of the ear, nose and throat surgeon. For example: Say we have an adult in middle life who is rather fat with a defective heart or kidneys, also infected tonsils, and is a poor surgical risk to whom we prefer not to give an anesthetic. This would be an ideal case. Again, we have a bleeder; here the risk is minimized by diathermy. In a tubercular case there is no shock or loss of weight by inability to eat. Then if it is absolutely impossible for a patient to leave work and go to the hospital, it can be done in one's office. I feel that it is an ideal instrument for the removal of post-operative lymphoid tags which at times reappear in the fossa after a good operation; by this I mean lymphoid islands and not large pieces of tonsil.

I will just mention a few other uses: It is valuable for hypertrophied lingual tonsils and varicose veins at the base of the tongue. It has a definite place in the

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shrinking of enlarged turbinates in the nose of adults where nasal breathing is difficult with a fairly straight septum. I have removed polyps from the nostrils with a fair degree of success in some few patients who refused to submit to surgery. I have had marked success in the removal of warts and nevi. It is most valuable in malignancies of the mouth and antra.

TECHNIC

Tonsillectomy by diathermy is done in the office in a sitting position by applying a small amount of ten per cent cocaine to the tonsil and pillars and a small amount to the base of the tonsil where it adjoins the tongue. I usually make two applications and by this time we are ready to proceed.

I use a curved hook-like needle and insert it about two m.m. in the tonsil and pull it away from the pillars then turn on current until the tissue is blanched, remove foot from switch thus cutting current off, then remove needle, never remove or insert needle with current on. Always stop current as soon as blanching occurs otherwise you are apt to coagulate too deep and cause increased pain besides the danger of secondary hemorrhage when the slough occurs. Coagulation generally penetrates about twice as far as the needle so if you go in two m.m. you coagulate four m.m. You can always go back and remove more but if you have coagulated too deep you cannot undo it, and if you are in the vicinity of large vessels it is no pleasant thing if part of the wall sloughs away. So I say do not coagulate by time alone but by the appearance and as soon as it blanches remove foot from the control. Again, if the needle spits and spurts you are getting too much current and should cut your machine down. Be sure to avoid touching the pillars—it causes intense pain and edema besides excessive scar tissue, also leaving ugly fossa.

I usually make about six such punctures on one tonsil, then wait a week and have the patient return for a similar treatment on the other tonsil. Then, after another

week, making two weeks, I am ready to give second treatment to the first tonsil; usually by this time all the coagulated tissue has sloughed away and it is now healthy looking and we can determine how deep we wish to go with this treatment. Then proceed with the second treatment like the first one. The last treatment or two we usually just lay the belly of the curved needle on the remaining tissue and blanch it. We do not want to go deep because we do not wish to penetrate the capsule. Each tonsil requires no less than three treatments. We have to know our anatomy and machine and be very careful when we are getting down near the bottom in order to prevent coagulating into the muscles and causing sloughing and excessive scar tissue and to avoid the vicinity of large vessels. We must also be sure to remove all of the tonsil tissue.

I feel that it is a more difficult procedure and more experience necessary to do it properly than is required for an ordinary surgical enucleation. I am convinced that tonsillectomy by diathermy can be done in the office with no loss of time in six to twelve weeks, with thorough knowledge of your particular instrument. The more experience you have the less will be the pain and the better satisfied the patients.

The disadvantages I have found are the following:

The number of treatments, requiring from six to ten weeks, during which time the patient has a moderately sore tonsil; however, this does not interfere with eating and does not require loss of time. Secondary hemorrhage. The general belief that it is a simple operation, without pain, and can be done by unskilled men is certainly a disadvantage and will bring the instrument in disrepute if it is persisted in as some of the ardent advocates of this method and some agents are prone to make the layman and prospective purchaser believe. Because it is neither bloodless, painless nor simple. It is not suitable for nervous patients.

SUMMARY

Disadvantages:

1. Neither bloodless, painless nor simple but requires more skill and knowledge than ordinary surgical tonsillectomy.
2. Unable to use on children.
3. Secondary hemorrhage.
4. Possibility of quackery.

Advantages:

1. Less chance of infection and bleeding, also useful in checking hemorrhage.
2. Can be used when surgery is contra-indicated.
3. Certain cases because of horror of operation, or unable to secure time off, etc., are benefitted by this that would not submit to surgery and in this way some organic disturbances are prevented.
4. Easy removal, at one sitting usually, of hypertrophied linguals and lingual varices.
5. The proper technic and equipment brings success.
6. The easy removal of remnants of lymphoid islands which at times appear in the fossa.
7. I wish to reiterate that it is a valuable contribution to oto-laryngology.

DISCUSSION

Dr. Cox: Electrocoagulation does not aim to supplant surgery, which will always be ideal, but in certain cases such as the cardiacs, the nephritics, those of hypertension and certain blood dyscrasias, it certainly is the ideal method. Electrocoagulation is not a procedure to be gone into very lightly. A very strict technic must be adhered to, not only in order to get good results but to avoid getting bad results, as has happened in the hands of a few.

In my practice, I take about two and a half months to do a thorough tonsillectomy by this method. The patients rarely complain of any severe throat. I have had only one case of bleeding, and that was among the early cases I treated.

Dr. Larose: We readily admit that diathermy should not be used in the place of surgery of the tonsils. We all agree to that. The main objection to diathermy has been from cases in the hands of inexperienced men. They have tried to remove too much tonsil in too short a time, in one or two sittings, and that is where damage to the pillars has happened and hemorrhage has occurred.

Another type of patient who may come under the classification of cardiacs, high blood pressure,

and bleeders is the patient who has an uncontrollable fear of the knife or the anesthetic. That patient will let his children be tonsillectomized, but he, personally, will not consider it. If you say, "I cannot do anything for you," then the doctor who uses diathermy is the man who will probably get the case.

Dr. N. H. Polmer: Six years ago, on a visit to Philadelphia, I observed the technic of Dr. William L. Clark, one of the pioneers in the electro-surgical removal of tonsils. He employed electro-dessication using the monoterminal application of a high voltage, high frequency current. Since then I have had the opportunity of witnessing the technic of a number of men who are successfully employing electrocoagulation by diathermy. I also feel that I have done some pioneer propaganda work in New Orleans by interesting a number of my friends among the otolaryngologists in electrocoagulation by showing them what I had seen about the technic.

The first two cases in which I employed this method at the Touro Infirmary were carcinomas of the tonsil which were treated in conjunction with the ear, nose and throat surgeon. In one advanced case of squamous cell carcinoma of the tonsil with metastasis to the parotid gland, the departments of surgery and of radiation had nothing to offer the patient. Electrocoagulation was attempted as a palliative measure. Two years ago, before the New Orleans Eye, Ear, Nose and Throat Club we showed this patient whose life had been prolonged several years by repeated coagulations.

The first case in which I did an electrocoagulation of the tonsils, in a case other than carcinoma, was a woman some sixty-three years of age, who had diseased tonsils. She was told that she had a bad heart and she knew that she had a bad heart. Tonsillectomy had been advised by four competent otolaryngologists. She consulted two physicians in this city, one having recommended the removal under local anesthesia, the other under general. She had a relative whose tonsils were removed by diathermy and knowing the good result obtained in that case, she insisted that hers be similarly treated. It was not until some discussion that I attempted this electrocoagulation which was accomplished in a series of eight treatments. The technic of Dillinger, whose illustrations have been shown this evening and whose technic is most frequently used at the present time, was employed. Following the operation the patient returned to her home in Denver and consulted her physician there. After being told that her tonsils were successfully removed and no remnants left, a check for the electrocoagulation was forthcoming.

I wish to emphasize some of the advantages of

this method which have already been explained, namely that this is a safe procedure when performed with the proper technic which includes no mutilation of the tonsil pillars. There is the freedom from post operative shock, a factor not to be overlooked in patients who are poor operative risks. There is the lessened danger of hemorrhage which is important in those patients who have an increased bleeding time. The ambulatory feature might also appeal to certain individuals.

Contrasted to this are the disadvantages which make this method not applicable to small children, in whom the greatest number of tonsillectomies are performed. This method is time consuming both to the patient and to the operator and requires treatment over a period of eight to twelve weeks. It does not supplant a well performed surgical enucleation.

Electrocoagulation of the tonsils, during the past five years, has been much acclaimed by certain groups of men and much decried by others, through prejudice or lack of appreciation of the proper technic. I have employed this method so far in carcinoma of the tonsil, in patients with hemophilia and with cardiac disease, and also in the treatment of tonsil remnants and lymphoid tissue following surgical removal by other methods. In every instance the patient was referred by a physician, usually an otolaryngologist who was not yet employing this procedure. I am glad to say that otolaryngologists recognize the value of electrocoagulation of tonsils, and today employ it not as the method of choice, but as a method par excellence in selected classes of cases.

Dr. Weil: I came to this meeting expecting to discuss vigorously this paper because I rather believed that the essayist was going to stress this as a frequently done method of procedure in a great many cases in which the tonsils required interference. I am very glad to see that the essayist has taken the attitude which I believe now is being accepted, that, although this method has advantages, and a good many advantages, it is not the operation of choice but an operation to be used in patients in whom surgery is otherwise contraindicated. In these cases, we are justified in using the method, provided always we understand that we do not get the same complete satisfactory results as far as removal of infection is concerned, which is usually the reason the tonsil is removed, as we do in surgical tonsillectomy.

I have seen cases which have been treated with electrocoagulation in which infection is still present and pus remains deep in the crypts. In a case of malignancy of the tonsil, in which surgery does not offer much, these patients react very well. I remember one case that Dr. Polmer spoke of, a carcinoma of the tonsil, whose life was undoubtedly prolonged and whose suffering was undoubt-

edly reduced by this treatment. I say by all means let us have the treatment, but at the same time let us remember that it is a treatment to be used only in certain selected cases in which surgery is contraindicated.

Dr. Lurie: Like everything else, the process of removal of tonsils by electrocoagulation is going through an evolution which originally began by the application of the electric current by means of two electrodes differently placed, a large indifferent electrode and a small active electrode, as shown on the screen here tonight. Subsequently, other operative means and other electrodes have been developed. We have one put out by one of our manufacturers which combines a retractor for the pillar and a tongue depressor which serves as the inactive electrode, while the usual needle serves as the active electrode. There also is another electrode, known as the bi-action electrode, in which poles of the current are in the electrode, which is just two points, about $\frac{1}{8}$ -inch apart. This electrode, operating electrically, seems to have a very good future because of the fact that a smaller current dose can be used and coagulation more easily accomplished. A newer electrode is being developed by which a larger indifferent pole can be applied to one part of the tonsil and a very small active electrode or active pole used similar to the usual operation. This electrode is very much like the ordinary dressing forceps. This device has interchangeable parts.

So you see the process of coagulation is undergoing an evolution and development, and perhaps in a short time diathermy will be so perfected that we may select it as a method of choice.

Dr. Collier mentioned the fact that complications following a good surgical procedure are rare. I just want to cite one of those rare instances. A young woman had had her tonsils removed by a very competent man, and he found a bleeding point high up under the plica which he had to tie off. In cutting the ligature ends, it evidently slipped up out of sight and was forgotten until five years later. The young woman was referred to me because of a painful condition which stimulated a right side torticollis. I examined the throat and found what appeared to be a lymph nodule high up behind the pillar. I suggested that that be coagulated. I found that my needle point went into quite a cavity and a large amount of pus was exacuated out of this cavity. Several days later, part, if not most, of the sutures, knots and all, were removed out of that cystic area. That is one complication which arose after a very competent surgeon removed a tonsil in a very competent surgical way. This is not a reflection on the doctor.

There is a difference in the coagulation of tonsils of various types. It has been my pleasure to

coagulate tonsils in patients ranging from the ages of 6 to 71 years, and there has been very little difficulty and very little that I can say was disagreeable to any of the patients. Any patient who will continue under treatment a sufficient length of time can have his tonsils as completely removed by diathermy as by surgical removal. Any acute complication, as an acutely inflamed or infected cryptic condition is not a complication postponing the application of the electric current, but is often quickly relieved by such application.

Dr. Boebinger: This is strictly an office procedure. Topical applications alone will suffice. There is no need of the use of injections of novocaine, because, first, you add more fluid to the tissue you wish to dehydrate. Second, in using the coagulation method, there is a possibility of causing too much reaction. As I said, this is strictly an office procedure. This is also an ambulatory case. One can call at the office, receive his treatment, and, after leaving the office, proceed to his work or else go home. One can eat anything he wishes. The reaction is reduced to a minimum in the average case, though we do get some cases in which the reaction is a little more severe. The average case should show probably only a little soreness. I have a case in mind that received treatment this afternoon that has complained of my touching the posterior pillar. That was an accident. I do not claim to be an expert, I still believe I am in the embryo class.

Electrocoagulation is nothing new to us, gentlemen. It dates back probably 25 years to the Bordeaux Clinic, in which they are doing excellent work. The instrument has got into disrepute because it fell into the hands of men who lacked general experience, men who did not know throat anatomy.

I am glad to say I am using probably one of the best instruments in the city. I am using one of the Fisher machines, which is close to being fool-proof.

You make insertion of the needle starting in the supratonsillar space, with a good assistant to hold the anterior pillar out of the way. One of the best things always to do is to be careful not to burn the anterior or posterior pillar.

Do not try to coagulate too much at one sitting. The novice usually tries to remove too much tissue at one sitting. Unless you coagulate too deeply or too often, you should not get into trouble with hemorrhage. Remember, you should not, under any circumstances, attempt to coagulate more than one tonsil at a sitting. Allow complete recovery from sloughing before attempting treatment of the other tonsil—which should be about 7 days. Otherwise, you will have a fast slough and probably a hemorrhage.

Dr. O'Kelley: I wish to give hearty approval

to the method of coagulation of the tonsils, not with a view or expectation that it will supplant surgical tonsillectomy under the proper conditions.

I have done considerable work in a small way by using this method, and I have found it up to the present exceedingly satisfactory. Tonsillar tissue has been entirely removed and thorough inspection several months later has shown that there has been no recurrence of any little islands of lymphatic tissue. I think probably stress should be laid on the question of the coagulation of the surface of the tonsil. We can coagulate the entire superficial surface of the tonsil and produce no bad results. It is only when we attempt to go deep, try to do too much at one time, that we are apt to get into trouble. I do not think that too much stress can be laid on that one point. Of course, the fact that you have to steer away from the pillars is absolutely essential and necessary, otherwise you will undoubtedly produce some discomfort.

I am now coagulating tonsils in an old woman, 77 years old, who has had pus coming from the tonsils for many years. They are little, flat things—they would hardly be noticed, but, on squeezing them, pus exudes. She constantly has a feeling of discomfort about the throat in addition to other symptoms. I have given three coagulations and she has stood them beautifully. She would not hear to surgery, of course. I think that one more coagulation on each tonsil will have her tonsils entirely removed and an area of pus secretion done away with.

The method of anesthesia has been very thoroughly explained. I use cocaine crystals, which I apply directly to the anterior surface of the posterior pillar and to the anterior pillar. In mopping those parts, you cannot help but touch the surface of the tonsillar tissue itself, but in making these applications with cocaine crystals, usually after about two or three, the patient tells you when he no longer feels any symptoms. You can press on them, move the tissue, and they have no sensation. When that stage is reached, then I feel I am ready to proceed with the coagulation. The results up to the present time have been exceedingly satisfactory.

Dr. G. B. Collier (closing): I had a diathermy instrument five years ago and sold it because I became disgusted with it. I was not using the proper technic.

I was in Chicago last November a year ago and went into the Chicago hospitals. I saw men using diathermy in cancer of the tongue and antrum, they showed me some cases which were two to four years old. The results were remarkable. When we had cancer of the antrum in our clinic we had been sending them to someone else for

radium or deep therapy treatment. I do not think now that is right. We have surgical diathermy and can offer them much more by this method.

I have a case of cancer of the tongue that is now about two years old. The late Dr. Lynch and I operated this patient. He told us he would rather be dead and insisted on the chance by operation, though we did not promise a thing. The man is now perfectly well to all appearances. He has about half of his tongue left, but talks alright, eats well and is able to work.

I want to stress that the main thing is not to do too much, at one sitting.

In regard to what Dr. Weil said about cleaning out the fossa. We certainly can clean the fossa out as clean as can be done in any other way if one is persistent.

SOME COMMON EAR DISEASES.*

D. E. STATON, M. D.

COLUMBUS, MISS.

Ear diseases are quite common and in mentioning some of the simple and very common conditions met with in our every day work I do so with the idea of refreshing the memory because of their very simplicity. Because of the simplicity and our every-day contact with them we are inclined to belittle their importance.

I was impressed with the fact that we are prone to overlook these common conditions and perhaps neglect finding the cause and best methods of eradication. Some of these common diseases are not always easy to bring to a successful end because we do not find the cause, or perhaps because we cannot find the cause and remove it. It may be in some remote part of the body far removed from the seat of disease or part affected. This cause may be in the paranasal sinuses, tonsils, appendix vermiciformis, prostate gland, gall bladder or other portion of the body and should if possible be found and removed.

Some of the common diseases of the external ear are acute and chronic eczema,

furunculosis, mycosis, and foreign bodies and cerumen.

Foreign bodies are usually removed best by syringing, as is cerumen, but a Quires instrument may best be used in certain cases; the finger on the instrument being inserted back of the body and raised, then brought forward by gentle traction. Cerumen may have to be softened for a few days with glycerin or other softening agent if it is impacted tightly in the canal. It can then be removed by syringing, with the help of gentle manipulation.

Mycosis, or otomycosis, of the ear canal is perhaps most frequently of the aspergillus family of molds. These molds can readily be seen in most cases under the microscope if the smear has not been made too heavily. No staining is needed. With these mold infections there may be some blocking of the canal and pain is not infrequently present if the tympanic membrane and ear canal have been infected for some time. There may be a large amount of dark or grayish material almost filling the canal, or there may be a thin, light colored, creamy material present. This material may be mistaken for pus or even for cerumen, with a consequent failure to cure it promptly.

Various remedies have been tried for these molds but perhaps the best is to cleanse the canal by softening or loosening with hydrogen peroxide, then syringing and drying thoroughly after which alcohol is applied. Alcohol is best used two or three times a day for two or three weeks to prevent a recurrence. Sometimes salicylic acid in alcohol is used but I find this of no advantage over the alcohol alone. Alcohol should be used at intervals to prevent a return of the trouble.

Eczemas are quite troublesome conditions which we often see affecting the auricle or auditory canal. The acute form is more amenable to treatment than is the chronic type. When these eczemas are associated with a discharge from the ear this discharge should be cleared up as soon as possible, for by so doing a cure of the eczema is

*Read before the Section on Eye, Ear, Nose and Throat, at the Sixty-fifth Annual Session of the Mississippi State Medical Association, Jackson, April 13, 1932.

facilitated. The external canal must be kept open, if possible by dry cleaning, but if not by use of syringe and solution. The less watery solutions are used just that much better is the chance for improvement, but if necessary to use them, dry thoroughly and apply an oil or ointment afterward. To keep down infection a solution of metaphen or merthiolate, or if preferred, acriflavine may be used. As an ointment for local application I use most frequently a mixture of balsam or Peru with oil of cade in vaseline, and find it keeps down crusting and is also healing. To begin treatment as early in the disease as possible is of the greatest importance. All constitutional factors should be removed if possible. I frequently prescribe calomel and a diet if it seems justified.

The chronic form of eczema I find difficult to overcome though it may be benefited by treatment over a long period of time. Locally I use on these chronic cases an ointment of resorcin, phenol, oil of cade and vaseline as a base. When possible this ointment is used once daily at my office, after drying the ear as thoroughly as possible. All constitutional troubles are cleared up and the general system put in as good condition as is consistently possible. Some text books intimate that these diseases may readily be cured by drying the ear well and painting with strong silver nitrate solution, but that has not been my experience for it is seldom that I get a real cure with any form of treatment; benefit, yes, but cure is another matter.

Furunculosis of the auditory canal is often very painful but unless it is very painful I do not incise them as they usually do well by tamponing the ear with cotton soaked in metacresylacetate, or cresatin. Aluminum acetate solution may be used if desired and is very good, though not as useful as the metacresylacetate which is on the market under its trade name of cresatin. Acriviolet and acriflavine have no abortive qualities in furunculosis, though they are of use as germicidal

agents to prevent infection. The mercury derivatives such as metaphen, and also merthiolate, are useful and are very satisfactory as germicides.

Odeneal¹ claims he has had excellent results with diathermy in furuncles of the external canal, and with the exception of diathermy and vaccines has found nothing of much benefit. I do not expect much from heliotherapy or ultra-violet as used locally for furuncles, though I consider it of distinct benefit when used as general irradiation to the body and limbs. Used locally I do not expect any great good from it in the eczemas though some writers claim it to be quite beneficial, even though it is not curative in action. Otomycosis is positively helped by local use of the ultra-violet light, but I get real benefit from it in nasal disease such as acute rhinitis, and in those patients who seem to take cold at every change of weather.

With diathermy my experience has been limited, and vaccines have been of little service in my hands. Foreign proteins are useful in some cases though I use them more in eye disease than in ear or nasal conditions.

Kurzhals² states that Besredka used bacterial substances topically for furunculosis because of his observation that certain bacteria seem to have a predilection or affinity for certain sites and organs, and that the derivatives of the viruses, or antiviruses, have a specific action for these bacteria. He applies the mixed staphylococcus antiviral in the meatus of the auditory canal and closes it with cotton, claiming the pain quickly ceases though the objective symptoms are more gradually relieved.

The most common diseases of the middle ear are probably the acute and the chronic catarrhal otitis media, or we may say the acute and chronic suppurative types. If possible to see them early we should endeavor to prevent pus formation, though this is often impossible when accompanying such acute infectious diseases as scarlet fever, influenza, etc. In these acute infec-

tious diseases the patient should be watched very closely and everything to be done must be done as early as possible, and if an acute otitis media develops paracentesis should be done promptly. As there is almost always an acute rhinitis present in these acute ear troubles the nose and eustachian tube should be kept free of thick mucus and pus by washing or irrigation with some such solution as salt, soda or boric solution, followed by an oily ephedrin mixture, or if preferred, the nasal discharge may be removed by suction and then adrenalin and ephedrin applied for the nasal and tubal congestion. If the auditory tube closes, or closure seems imminent, the Politzer bag and tube may have to be used, or perhaps the eustachian catheter either with the bag or pressure machine. Precaution must be taken to prevent blowing more infection into the middle ear while inflating, however. If the drum membrane is opened early a simple puncture or paracentesis may be all that is needed, but if pus has formed it is best to make a large incision from the upper posterior pole down to near the inferior margin; in fact I usually make a cross incision as well to facilitate drainage. Recently I have been using an adrenalin and ephedrin mixture in the ear canal and this in most instances reduces the inflammation in the drum membrane very satisfactorily. If pus discharges it may be removed by wiping, suction or syringing several times a day or as needed.

In the chronic simple otitis media deafness may be progressive and we must keep the nasal mucosa free of discharge by suction or alkaline washes followed by an oily spray, such as ephedrin inhalant. The deafness must be combated by use of the eustachian catheter and drum massage with the otoscope or similar means.

In the chronic forms the nasal cavities must be put in good condition by correcting any sinusitis, removing diseased tonsils and adenoids, deflected septum, etc. If granulations form in the middle ear they may be cauterized or touched with strong

silver nitrate solution. Endeavor to make the middle ear as near sterile as possible by use of neutral acriflavine, metaphen, merthiloate or other antiseptics, or zinc ionization may be used to advantage if the mastoid cells are not involved. If these procedures do not clear up the condition you may have to resort to surgery in the form of the radical mastoid operation, removal of polyps, or some modification of the mastoid operation.

Babbitt³ mentions an operation for attic drainage in chronic suppurative otitis media in which he inserts a blunt right angled probe up into the postero-superior quadrant and reams out this space, and if necessary push aside, though do not remove any part of, the malleus and incus. He then inserts an angular curet and reaches to the iter ad antrum and cures away any blocking granulations. He uses warm irrigations for a few days after the operation, and claims to get good drainage with a cure in the majority and benefit in all cases.

Alexander⁴ lays emphasis on the following points in regard to otitis media: 1. In all nurslings and very small children with nutritional disturbances always examine the ears regardless of lack of symptoms. 2. Lowering or bulging of the postero-superior wall of the auditory canal indicates mastoiditis or antritis. 3. If the otorrhea has continued for as long as four weeks without a tendency to heal, the mastoid should be opened irrespective of local signs. 4. In double suppurative otitis paracentesis should be done immediately on both sides, however in cases of bilateral mastoiditis the most severely affected side should be opened first; the other side often heals without operation.

Before closing I wish to mention one other disease, viz, otosclerosis. Otosclerosis is recognized as a disease in which the bony capsule of the labyrinth is excessively spongy; some writers claiming this sponginess is a congenital condition but does not affect the hearing until about the age of puberty or afterward.

Yearsley⁵ claims otosclerosis is due to slow poisoning of the cortical cells from chronic intestinal intoxication. He states that every cause shows some of the cardinal signs of familial chronic intoxication, and indications for treatment are disinfection of the colon and administration of vaccines cultivated from the intestines.

Mirvish considers there is a close relationship between rickets, osteomalacia and otosclerosis, and similar treatment should be used for all three of these diseases. Three patients were treated with subcutaneous injections of parathyroid extract-Collip twice a week, and he claims all showed marked improvement, thus seeming to prove that the blood calcium is affected through the parathyroid gland.

Wasowski states there is otitis interna in 96 per cent of all cases of acquired syphilis and the commonest disturbance is a shortening of bone conduction, which occurs in 63 per cent of cases. Hennebert's symptom was absent in over one hundred acquired cases but was present in about 20 per cent of the congenital cases.

Wittmaack⁶ experimenting with fowls attempted to produce otosclerosis by blocking the veins of the neck and foramen magnum, thus producing passive congestion of the labyrinth. Microscopic examination showed changes resembling those of otosclerosis, consequently he concluded that otosclerosis is due to venous stasis in the region of the bony labyrinth. He cites as proof of this the fact that the vein coming from the otosclerotic focus is dilated and, therefore, there must have been stasis.

As regards treatment of otosclerosis most writers agree that local treatment is of very little value, and the condition must be treated through the general system. Of the various agents tried, such as the hormones, iodides, viosterol, etc., none have been of any appreciable service, but recently Birkholz⁷ has been using calcium bromide intravenously and claims good results in the two cases on which it was tried.

Though perhaps not connected in any

way with otosclerosis I wish to mention at this time a case I had recently. This patient, a man 34 years of age, came to me for what he thought was headache. He was apparently a deaf-mute but could read and write; his sister who was not a deaf-mute gave me the history of the case. She stated that about four days previous to seeing me he complained of headache which became so severe that she thought he would have a fit. The history showed that up to seven years of age he could talk and hear as well as most children, but while playing in the yard one day he suddenly became deaf, and could not talk but only make grunting noises; he was not sick nor had he been sick. The history showed he had never been sick with the exception of sore throat at times; no discharging ears at any time. When I saw him he appeared to be in great pain, and on examination he was found to have a severe conjunctivitis, both frontal sinuses and the left maxillary antrum were dark on transillumination though no pus was seen in the nose. On washing the antrum no pus was returned. On laryngeal examination the vocal cords appeared normal; the tonsils were removed some years ago. Blood and urine were reported negative. A spinal was not done on him. I first thought the headache might be due to the sinusitis but because of the severe conjunctivitis and photophobia I cocaineized the conjunctiva with four per cent cocaine instillations, and after the third instillation he began to smile and wrote that the light did not hurt his eyes now. The conjunctivitis cleared up promptly under treatment with metaphen solution.

What was the cause of deaf-mutism? Was it a case of hysteria with simulated deaf-mutism all these years or was it a syphilitic condition? Or just what was the true cause of the deafness and inability to talk?

CONCLUSIONS

1. Ultra-violet light is serviceable in certain ear diseases but has a limited field.
2. Our knowledge of treatment in sup-

purative ear diseases is not yet complete.

3. The cause and treatment of otosclerosis is not understood.

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DISCUSSION

Dr. Ross E. Anderson (Jackson): There is just one condition that I should like to mention and that is reflex otalgia. This is not a disease of the ear but rather an ear symptom. Reflex otalgia is pain in the ear not due to disease of the ear itself. It is commonly seen following tonsillectomy and as an accompaniment of acute tonsillitis and peritonsillar abscess. It can usually be relieved by cocaineization of the sphenopalatine ganglion in the nose. This is not feasible in small children. In these cases codeine may be given. Eye conditions sometimes cause reflex otalgia. I knew of one case of reflex otalgia caused by atrophy of the bulb on the same side. Enucleation of the eye caused a disappearance of the earache. Another common cause of reflex otalgia is dental conditions, especially impacted wisdom teeth, also known as third molars. I knew of a patient with acute mastoiditis and after three or four mastoidectomies the pain in the ear still persisted. Careful examination revealed an impacted lower third molar on the same side. Removal of the tooth caused a cessation of the earache. I had a case in my own practice a few months ago, a young lady sixteen years of age who had been suffering from earache for six weeks, with pain and soreness over the mastoid. Examination of the ear, including the roentgen ray, revealed a normal ear and mastoid. The roentgenogram showed an impacted lower third molar on the same side. Removal of the tooth gave relief of the earache. So, please remember this condition—reflex otalgia. When a patient comes in suffering with earache and we find a normal ear, we may as well look somewhere else for the cause. One other cause I failed to mention and that is nasal conditions.

Dr. C. C. Buchanan (Hattiesburg): This last week a doctor brought a patient to me one morning stating she had some kind of a bad ear trouble, and it was necessary for him to give her three hypodermics of morphine the night before and still she did not get relief. I could not find anything wrong with her ear. It looked perfectly normal to me. I have a habit of pounding around on the teeth a little bit to see if I can find anything wrong, so I found a sensitive tooth and promptly showed her in to a dentist. When he made an examination, he agreed that it was abscessed, and that it was necessary to promptly remove it. When he made his injection around the tooth preliminary to extracting the tooth, the ear got perfectly easy. She made this statement to him—I do not know if it was on the inside or the outside—but any way following one of the injections that he made she said, "Something happened when you put that in there, my ear got easy." Dr. Staton made another statement that I am sure he did not intend to make. He said that under certain conditions sometimes a simple puncture was all that was necessary. I do not believe he intended to make that statement. I do not believe there is any condition of the ear where simple puncture is good for anything at all. If the ear drum needs to be opened it needs to be done thoroughly and a good long incision is the one thing that I can find that will ever do any good. I think a simple puncture will sometimes give relief, but it promptly heals and it is necessary to repeat it.

Dr. Staton (closing): I thought perhaps I might hear someone say something about this patient I had that apparently became a deaf mute. He certainly would not talk or hear either—had not since he was a child, and I can hardly conceive of a person in an hysterical state going that long without somebody knowing something, or talking. He had no symptoms that I could see except what I read you. He had been perfectly well until he came to me the day before he did, for what he thought was a headache. I think the headache was due to the conjunctivitis because as soon as I cocaineized the eye he got perfect relief from what he called headache, and I put a shade over his eyes so that he could still see but to protect his eyes from glare and light and gave him a solution as a wash and in a short time, about two weeks, he was perfectly well. That has been something like two months ago and he has not had any pain since then, no other trouble at all.

Regarding Dr. Buchanan's criticism of simple puncture or paracentesis I will say that in doing this puncture it is done in all cases with a v-shaped knife and gives excellent drainage. In only a very few cases has it had to be repeated, in my experience.

THE CONTROL OF TROUBLESOME
COUGH IN PULMONARY TUBER-
CULOSIS BY THE USE OF COM-
BINED BACTERIAL ANTIGENS
WITH THE EXTRACT ANTE-
RIOR PITUITARY.*

A PRELIMINARY REPORT.

EMILE A. BERTUCCI, M. D.

NEW ORLEANS.

It is a well established fact that rest, especially lung rest, is of primary importance in the treatment of pulmonary tuberculosis. It is also a fact that patients with troublesome cough do not permit of sufficient rest when they are required to sit up part of the night in an effort to relieve their lungs and bronchi of accumulated products of the disease.

Patients in Sanatoria, where good management can be exercised, together with education of the patient, to avoid unnecessary coughing, can be made to control a certain amount of this added exertion, but there are those who cough in spite of correct hospitalization, often keeping others awake around them. This is especially true of home-treated cases in the advanced stages, where there is a copious amount of sputum and who are forever broadcasting their malady to their neighbors by incessant coughing and expectoration.

Owing to ultimate invasion of secondary organisms of the pus group, which adds to the bulk of waste, the patient often sympathizes with himself on the amount of sputum discharged during the 24 hours, which to him is at times both nauseating and discouraging.

The amount of toxemia resulting from this secondary infection is also an extra burden to be borne by the advanced case.

Cough sedatives, often narcotics, have been the prescription to be used when necessary, and in many cases a standing order, with these troublesome cases. This method

of relieving cough is as old as some of the oldest remedies and do more harm than good on account of its affect on secretions as well as the gastro-intestinal tract, thereby adding an extra burden to the already toxin loaded tuberculous case. We must guard with caution the indiscriminate use of any drug which may have a tendency to upset the digestion in an effort to control cough.

If we can have at our command a substitute which is scientifically correct that will eliminate this troublesome symptom of cough and which will at the same time lessen the toxemia, give perfect rest, elevate the morale, give him a feeling of strength and well being and a better outlook on life from the visible improvement in the clinical symptoms, I feel that a step forward will have been made in progressive medicine in the management of tuberculosis.

In a series of 78 cases of tuberculosis of the advanced type, the injection of the combined ecto antigens of the streptococcus hemolyticus and non hemolyticus, staphylococcus aureus and albus, 1000 million per c.c. with 1 to 2 c.c. of the extract anterior pituitary, have proven successful in every case treated for the direct control of cough and excessive expectoration. Up to the time of this report so far, there has not been a single failure to almost totally check or eliminate entirely this troublesome symptom. The clinical improvement which followed was that of the cessation of cough, a remarkable diminution of the quantity and character of the sputum with a change in its consistency. A general feeling of well being and added strength thereby giving to the patient added encouragement and hope. A complete night's rest was effected in over half of the cases treated, and in the rest, patients awoke during the later hours of the morning with a very slight cough productive of little sputum which lasted for a few minutes allowing them to go back to sleep for another few hours. Most cases, however, slept from

*Read before the Orleans Parish Medical Society, May 23, 1932.

8 to 12 hours without having to awaken to cough.

METHOD OF ADMINISTRATION

Begin with one-half c.c. of the combined antigens, intravenously, increasing one-half c.c. daily until two c.c. are given. At the same time one c.c. of the extract anterior pituitary is given subcutaneously, daily.

When the 2 c.c. point was reached I then combined the two into one injection, using 2 c.c. of antigens and 1 c.c. extract anterior pituitary given intramuscularly in the gluteal region every other day or less often, according to the type of case. In some cases it was only necessary to give the injection once per week in order to keep patient practically cough free. In some stubborn cases 2 c.c. of extract anterior pituitary was given at each injection, totalling a 4 c.c. injection. I do not believe there is any curative value attached to this method on the tuberculous process itself, as most of these experiments were made on the hopeless type of cases, but I feel that there is room for further investigation along these lines. In the lesser advanced types, however, it did no harm to the patient, but instead there was a tendency towards a general improvement in the clinical symptoms. I sincerely state that no definite conclusions are reached on the physical phase as they are yet unripe, my only interest is in the treatment of troublesome cough and expectoration.

In conclusion, I am indebted to Dr. Chaillé Jamison for the courtesy and privilege for giving me the opportunity to demonstrate this treatment in the Breaux Building, Charity Hospital, on the worst cases of multiple cavitation and caseous pneumonia where they could also be watched both by the Sister and nurse in charge. I feel that the results obtained both in private practice and in the hospital were worthy of report. I ask with the aid of the Orleans Parish Medical Society that further co-operation be given through the State Health department and tuberculosis organizations, to allow this work to con-

tinue so that I may be able to prove the actual merit of the treatment.

DISCUSSION

Dr. Jamison: Any attempts to help the advanced tuberculous patient are, of course, praiseworthy. I do not know enough about Dr. Bertucci's method either to endorse or condemn it. It is only fair, however, to say that I checked up on the statements that he has made tonight in some 10 or 12 cases. The nurse, who is very intelligent, and the sister, both stated that the patients coughed practically not at all under this method of treatment, and that the quantity of sputum was very much diminished. This was so marked among certain of them that they requested that they get these hypodermics. I confess that I do not know what possible mechanism could be at the bottom of it.

It strikes me as definitely dangerous to give patients 0.5 c.c. of intravenous vaccine. I confess that I would not like to take 0.5 c.c. intravenously, but there were certainly no bad effects noted in the patients under observation in my service. I am not at all sure that when a man has a good deal of infection in his lungs (particularly in the cavities), complete suppression of the cough is a desirable thing. As a matter of fact, the only method that the patient has of draining is, of course, the cough and, if we suppress the cough for 24 hours, I hardly think that it would meet with approval.

However, Dr. Bertucci's work is certainly interesting to me and I hope that he will be able to carry it on to a more conclusive result. I want to be understood as neither endorsing nor condemning it, merely because I do not have a sufficiently clear idea of just what it is all about.

Dr. Gooch: I have been interested in antigens, as in all biologicals, for some time, I have used them in acute and chronic sinus and mastoid cases, and have had a certain amount of success with them. In these cases it was possible to note the amount of pus, and secretion in the nose or in the ear before and after the use of antigens, and I believe they have been of real value in decreasing the amount of secretion.

One of the doctors discussing the paper seemed to think the effect of the antigen was to suppress cough without diminishing the secretions. I believe the cough is suppressed because the amount of secretion and pus are actually diminished and, therefore, the patient has less need to cough.

As long as there is pus in the lung, cough reflects will be excited, and the surest way to quiet the cough is to reduce the amount of pus, which is, I believe, accomplished by the use of antigens.

I think the essayist ought to be given a few

extra minutes to explain why he combines antigens with anterior pituitary extract.

Dr. Bertucci (closing): I will first answer Dr. Jamison's question as to the danger in using vaccines intravenously. This is not a vaccine, it is an antigen, they can be given intravenously very safely, and were tried on hundreds of cases before I tried it. They are an established preparation on the market which have been used extensively intravenously. I have used as high as 5 c.c. in the vein. I have used 5 c.c. intravenously on a number of cases without any deleterious effects, but I gradually stepped up the dose. There is absolutely no harm that could come from the intravenous administration of antigens.

Dr. Brooks brought out the question of fever and reactions. There is absolutely no reaction, no general or local reaction, that has been recorded in any of these cases. There may be some cases, I do not know what percentage, but a very small one, in which you may have reactions, but those are very rare. I have not seen any reactions or deleterious effects in my 78 cases, even when giving 2 or 5 c.c., therefore, I say it is perfectly safe.

Dr. Eustis and the other doctor have asked why I used extract anterior pituitary. Experiments have been performed in which extract anterior pituitary has been found to be an antagonistic to the thyroid gland. Loesser, in the Archives of Experimental Pathology, has made experiments by giving pulverized anterior lobe to young dogs, and has found that there was a remarkable reduction in the iodine content of the thyroid gland, in addition to its morphologic changes. I have always contended, and have found that in almost every tuberculous case, there is an increased metabolic rate owing to the fact that there is a hyperfunctioning of the thyroid gland. Having known about the action of extract anterior pituitary gland on the thyroid through these other experiments, I began to use it as a routine treatment by giving 1 c.c. of the anterior pituitary extract in all my tuberculosis cases. When I began using it, I noticed a remarkable diminution in the cough without the use of any sedatives at all. I began to wonder why the cough subsided so I began to study the mechanism of cough.

As you know, the mechanism of cough is due to an irritation on the bronchial mucus membrane of the respiratory tract, when in a hypersensitive state, and which produces an impression on the excitor fibers of the pneumogastriacs acting on the medulla. This irritation being brought about by excessive secretions plus a hypersensitive individual, brings on a cough, and he tries to expell the cause of the irritation, and you have a circle started. Therefore, if we lessen the irrita-

tion, plus lessening the exciting factor, we will be able to have suppression of the cough.

The extract anterior pituitary did not alleviate these cases entirely but it did some good in almost every case. So I thought if I could strike at the secondary infection and lessen the secondary toxemia and also to lessen the irritation on the bronchial mucus membrane, I might be able to get better results, so I began to use both the extract anterior pituitary and the antigens.

This particular type of antigen is put up by Parke Davis & Company and is called immunogens. The reason I used immunogen is because this particular antigen put up by this company is practically toxin-free, owing to the fact that it contains very little protein. The immunogens are extracts of the bacteria themselves and not of the culture medium, from which they have developed. We have other antigens on the market known as lysates. These auto lysates are prepared by a different method of extraction. The antigens from Parke Davis are prepared by rapid extraction with physiologic salt solution, eliminating the lysates, and the toxins. It cannot be classed as a non-specific protein because it contains very little protein. The total nitrogen and protein estimation is 0.1 of any other antigen used for a similar purpose. Therefore it does not give a reaction for this reason. I find that this particular antigen is the best I can use. In regard to the streptococcus in tuberculosis, this organism has been isolated, by Pruder from the blood of T. B. cases. Experiments have shown that if we inject the bacilli of tuberculosis in rabbits, it will produce a tuberculous condition in the lungs, but it will not go to cavity formation unless we inject a number of streptococci. Then we will have the typical ulcerative condition that is found in man. So there is something to this streptococcus, something to this toxemia, and I believe the reason I obtain such good results in using streptococcus bacterial antigen is because it has some action on that particular germ which, I believe, is the chief invader of the secondary infection.

I hope I have made myself clear as to why I have used the antigens and why I have used extract anterior pituitary. If I have not, I wish you would call my attention to it, but I have tried to make it as plain as I possibly can.

I want to thank Dr. Jamison again for his cooperation and his remarks in discussing this report. I should not like to stop here but to be allowed to carry this work on still further for the benefit of others, to see if it is really 100 per cent effective.

In answering Dr. Blum, I have had only five cases of chronic bronchiectasis, in which it was tried. It is very good in chronic bronchiectasis

by lessening the amount of sputum and also changing its character from a yellowish to a whitish color. It had lessened cough to a great extent, but not to the extent in which the cough has been lessened in tuberculosis. It has helped in chronic bronchitis and bronchiectasis but not as much as in tuberculosis, probably for the reason of the thyroid dysfunction or for other reasons which I cannot explain.

As to cost, a full injection, amounting to 3 c.c. or a little over, costs 72 cents per injection, but the injection does not have to be given every day. It is given twice a week after the first few injections. What I am trying to have the Society do, is to sanction further experimentation and ask that the state health authorities take charge of it, which they will do if they have the sanction of this medical body. I am sure they would, and if the medical body will sanction further experimentation, I believe that the state health department can use it in their various institutions. A great fortune is not required to carry on this work, it is only necessary that a little money be allotted to carry the work still further.

THE RESPONSIBILITY OF THE PUBLIC FOR ITS OWN DEATH RATE.*

JULIUS L. LEVY, M. D.

CLARKSDALE, MISS.

I was prompted to write a paper on the responsibility of the public for its own death rate upon reading an editorial¹ by a former chief of mine, Dr. C. Jeff Miller, who taught me Gynecology while a student at Tulane University and whose service I was fortunate in getting while serving my internship at Charity Hospital in New Orleans several years ago.

I do not think that I will go amiss in quoting from Dr. Miller's paper in which he states that the salvation of the individual suffering from acute appendicitis, cancer, tuberculosis, or syphilis, etc., undoubtedly

depends above everything else upon the promptness with which he obtains relief—but relief cannot be given to him until he applies for it and until he accepts it. Surgeons and physicians can not force people to consult them, they can not operate

on them or administer treatment to them against their wills, and the group "opposed to operations" and swallowing with avidity old wives' tales of their horrors is still surprisingly large and is composed of a surprising number of persons one would be inclined to credit with more common sense.

The chief activity of lay persons engaged in the business of self-treatment is the taking of purgatives, and a purgative in acute appendicitis has all the effect of a charge of dynamite. It practically always initiates rupture, gangrene, abscess formation, and peritonitis. It practically always, as Moynihan says, is not only the impressive antecedent of such pathology but also its definite cause.

Many occupations have injurious effects on the physical condition of those engaged in them. Those who work with poisons, such as lead, arsenic, mercury, picric acid, etc.; or those who have been exposed for

long period to dust, heat, or humidity may be impaired seriously as the result of their work, therefore, these people should consult their physicians at regular stated intervals so that if anything should ever happen to them while at their respective occupations, their physician would be better able to render them assistance and recognize their condition and do something for them before the undertaker is called.

Infectious diseases strike primarily at children. The bodies of young people are fresh and vigorous; their organs do not break down or wear out with neglect and abuse until adult years. Children rarely have such diseases as hardening of the arteries or cancer, nor do they have chronic kidney disease such as affects men and women of middle age. As a result of the control of infectious diseases most of our children now reach maturity. But unfortunately general medicine does not give assurance that they will live to the ripe old age that adults can and should attain.

We have been successful in getting our children raised, but that is only one phase of our problem. How long are they going

*Read before Clarksdale and Six Counties Medical Society at Clarksdale, Mississippi, March 23, 1932 by Invitation.

to live as adults? This is the question that is beginning to confront medical science of today and will confront the medical science of tomorrow even more.

The situation that confront us is this: as we have diminished the occurrence of one disease, another has risen to take its place. A few years ago tuberculosis led in the causes of death; today it has fallen to fifth place. In its stead are diseases of the heart and blood vessels and only second below them is a newcomer among the leaders of mortality. This new arrival that has forged ahead is cancer.

Now there is a perfectly obvious reason for this change in the causes of death. The great increase of cancer today is due mainly to the fact that people live long enough to have a disease which rarely comes before thirty. Cancer is increasing largely because the boy and girl who a hundred years ago would have died of diphtheria or smallpox now live long enough to develop cancer. They also live long enough to have diseases of the heart and blood vessels, which are likewise more prevalent after thirty.

The measures of general preventive medicine which have successfully contended with infectious diseases and so have raised our average length of life are useless in controlling the diseases of middle age—those which now head our list of mortality. No amount of sanitation, such as quarantine and water purification will affect them. They can be controlled only by personal preventive medicine which involves the active participation of each individual.

The chief tragedy of cancer is that close to 60 per cent of these deaths are totally unnecessary. This tremendous wastage of human life is preventable, at least in certain types of cancer, in about three-fifths of all cases. It is due to ignorance and delay, both inexcusable causes, both of them remediable causes, provided the public and profession league themselves together against their common enemy. We have no desire, as a brilliant English surgeon

puts it, to scare you to death; our aim is rather to frighten you into life.

There should be a law to legalize the practice of chiropractic in this state because even to the lay mind the idea that all disease of whatever character is due to spinal displacement of a mild sort, and that cures of such ailment as tuberculosis, smallpox, diphtheria, scarlet fever and others can be effected by manipulation and finger-ing of the spine is preposterous.

Since we have serums for the prevention of diphtheria, typhoid fever, and smallpox, how often do we see these diseases? Just two years ago we had an epidemic in our community of smallpox, fortunately none of these individuals died but since this is a preventable disease why does not every individual become vaccinated so as to make this disease historical instead of our present day enemy?

Education will save lives but to achieve this end will require much education. It is on this point that we come to a condition peculiar to our own country. In some of the nations that have the lowest death rates for mothers there is governmental supervision of maternity care. We, however, with our own type of government do not as a rule favor such intervention and control. Our republic is organized on the assumption that every man and woman enjoying its privileges is educated sufficiently to take a part in the government. To this end we spend billions of dollars in teaching boys and girls to read and write, to become self-supporting, and to be conversant with political matters. But we discriminate against mothers. We do not spend our money to educate women to a knowledge of motherhood. The women of this country have neither supervision in maternity nor education for it.

Only a comparatively few women can afford to employ a physician throughout the full period when they need observation and information. Millions can barely manage to have this aid for even the short

period of birth, and some must go without it entirely.

Prevention of disease is a new aspect of medical science; its tremendous value has not been fully appreciated. Disease is preventable, death is postponable, and health is purchaseable. But these statements do not apply to money spent for medical care in sickness. The money that buys health and postpone death is spent for prevention.

Consider these facts for a moment and you will see how indifference to prevent adds to our cost of medical care. In the United States there are seven hundred thousand tuberculous patients—tuberculosis is a preventable disease. Each year there are seven hundred thousand persons incapacitated with malaria—another preventable disease. In 1929 there were forty thousand cases of smallpox in the United States—that disease can be prevented at inconsequential cost. It is estimated that on any one day in the year there are more than a million cases of venereal disease under treatment—that group of diseases is likewise preventable.

But in this country the really great economic waste from disease comes from the permanent interruption of wages due

to premature deaths—deaths mainly from the diseases of middle life which could have been postponed by personal preventive medicine; that is, the annual physical examination which detects degenerative diseases in their incipiency. The figure for loss of wages due to postponable death is as I have said, estimated at the enormous sum of six billion dollars. Add to that, if you can put a money value to it, the suffering, the hardships and the broken homes that come in the families where postponable deaths occur. And then contrast that sum with the pitifully inadequate amount spent for prevention.

In preventive medicine, particularly personal preventive medicine, the annual health audit, there is held out to the people of this country the means of saving money, suffering, and lives, aggregating to a tremendous total.

Some day, and I pray that it will be soon, the American public will wake up to the fact that the high cost of medical care at which they grumble is a needless burden and one that is self-imposed. What they are paying for is in reality the high cost of indifference to preventive medicine.

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THE INFLUENZA EPIDEMIC

New Orleans and Louisiana has recently suffered from a severe epidemic of influenza. The extent and the severity of this epidemic may be judged from the mortality rate of New Orleans published elsewhere in this Journal, and the morbidity rate published by Dr. O'Hara. The last week for which reports are available over 4,900 cases were listed by the office of the State Epidemiologist but in the week previous there

were over 7,100 cases listed. Fortunately this wave of influenza has been comparatively mild, and only a relatively small number of deaths have resulted from the disease. An occasional case of influenza pneumonia brought to mind the tragic epidemic of 1918. In the majority of cases the symptoms were largely referred to the respiratory tract, and though a certain number of patients had so-called gastro-intestinal "flu", and in a few the nervous and muscular symptoms predominated.

As soon as it became evident that influenza was going to occur in epidemic proportions, active measures were taken by the proper authorities to do what they could to circumvent the disease. Newspaper notes were published in reference to what to do and what not to do, and in Charity Hospital isolation wards were established in which the patients were segregated under a strict isolation. Dr. Vidrine ordered the operating rooms closed except for emergency operations. Whether or not the disease will return in a fresh and more severe wave a few more months from now is not known. It is more than probable that this present epidemic represented the second and more severe wave of the disease, and when some months ago a few cases occurred, then took place the first so-called wave of the disease.

SOME THOUGHTS ON THE REPORT OF THE COMMITTEE ON THE COSTS OF MEDICAL CARE

The report of the Committee on the Costs of Medical Care represents a sincere and honest endeavor on the part of the makers of the report to find a method and a means whereby it would be possible to distribute and equalize the cost of medical care among a large group of individuals, and to secure efficient and effective service for all. The makeup of the Committee, which ceases to function in a few weeks, is such that no one can reflect upon the motivation nor the honesty of the various members who have labored unselfishly and have spent

much time in furthering the study which it is hoped will do much to eradicate the present unsatisfactory state of medical practice.

One of the most important, one might say the most important and basic recommendation of the majority members of the Committee has to do with the establishment of group clinics, functioning very largely financially upon an insurance basis. It should be borne in mind that the studies under which this report are based were begun, and many of them completed, preceding the depression, and perhaps the report would not have been quite so enthusiastic about the establishment of clinics, which are supposed to lessen cost of care through lowering of the overhead of practice, if the ultimate story of these clinics that had been organized, was known. Group clinics have been failing right and left all over the country. The greatest and best known of them all, which has laid aside a large surplus, at the present time, it is reported, is working on a greatly reduced budget and with an income which seems ridiculous as contrasted with the moneys that were accruing before depression.

The minority report of the Committee discusses the group clinic plan in some detail, one of their first objections being that it would form a medical hierarchy. That is undoubtedly one of the real objections that will be presented by the average medical man in the discussion of the plan. There is another feature which the Committee, in neither the majority nor the minority report, has taken into consideration: when medical service is supplied for a small lump sum the doctor is frequently inundated with unnecessary office visits and useless house calls. The Committee neglects the fundamental feature that is inherent in all insurance schemes; the insured bears with the insurer a part of the responsibility and a portion of the risk. If fire insurance is taken out on a house the company is willing to insure up to eighty per cent of the value of the risk, but the insured must be prepared to stand a part of the loss if the

house is destroyed. In this way it evolves upon the insured to take proper care of the property that is insured. In life insurance there is no way of knowing the value of a risk but the natural inclination of everyone to live as long as possible obviates carelessness and does away with the factor of not taking care of that which is insured. All medical insurance schemes lack this element. It would seem that a rational procedure would be to provide by insurance for a major portion of expense of illness, but to leave to the insured the responsibility of taking care of say one-fifth of the expense of illness through current income or savings. In this way patients would not make these unnecessary demands upon a practitioner which makes him detest contract medicine in any form, which ultimately force him into a groove, and which finally make him a master of routine.

Another serious objection to the scheme so outlined would be to reduce the medical profession more or less to a dead level. If this plan as suggested is put into effect the great bulk of the medical profession would work under a plan in which the income would be small, though probably sure, and which would be practically the same for all practitioners of medicine. There would be consequently a loss of initiative to progress and advance. The physician would be very much in the same position as the civil service employee whose hours are fixed, who has a definite income, but whose willingness to advance himself and to improve his status is virtually nil. Some of the best minds in this country at the present time are in the medical profession, and the great majority of young men who go into the profession nowadays enter not only for the love of medical science but also because they realize that an individual, with study and with native ability, can make a success in his chosen field. In spite of the plausible arguments that the majority in favor of the group system have advanced, it would certainly seem that the young man of excellent mind would realize and appre-

ciate that his work would not be individualized, but would be mass or group work in which ability would mean little, and the stimulus to improve himself would be lacking; consequently a man of superior intelligence and intellect would go into other fields in which there would be greater incentive to make use of his mental ability than in the field of medicine.

It is true that medical men in large centers disproportionately are in excess to the number of potential patients. It is possible also that medical students are being graduated in greater numbers than the needs of the country demand. It does seem, however, that medical service, if distributed adequately, would give the physicians more work and it would mean better service to patients than at the present time. Just how this can be accomplished is not explained, we believe, practically in the report, although it is hinted. This is one of the failures of the report, and one of its features of which the critically minded medical man would disapprove.

Certainly doctors who have read the report have not been favorably impressed with the attempts to find a solution of their present day difficulties nor do they feel that an answer has been found to the perplexing question of adequate care for him who has an adequate income. But above all, to the physician, preeminently an individualist, the greatest defect in the plan of the Committee is the divorcement of the personal element from the practice of medicine.

A patient is a person with a personality, who can best be treated by a doctor, not by a corporation.

DR. HENRY DASPIT

Henry Daspit is dead at the age of forty-eight. His death, as a result of pneumonia, will leave a vacancy in New Orleans medical circles which will be hard to fill.

Daspit was well known in Louisiana and Mississippi. As Dean of the Graduate School of Medicine of Tulane University of Louisiana, he became intimately acquainted with the older practitioners of this State and Mississippi who had taken courses at that school. As Professor of Neuro-psychiatry in the undergraduate school of Tulane he was known to the graduates of this school through the past fifteen years. Daspit occupied many important positions in the City. For fourteen years he was superintendent of the City Hospital for Mental Diseases and for many years was on the staff of the Charity Hospital and the Touro Infirmary. He held other significant medical positions. His high degree of social mindfulness made him a prominent worker in many organizations which had to do with the social betterment, not only of those mentally impaired but also in other social fields.

The many friends and former students of Dr. Daspit will mourn deeply for him who was always ready to aid them at any time and to help them through any difficulties.

HOSPITAL STAFF TRANSACTIONS

CHARITY HOSPITAL MEDICAL STAFF MEETING

The regular monthly meeting of the Charity Hospital Medical Staff was held November 22, 1932, Dr. Wallace Durel presiding. Dr. Giles presented the first series of cases. He showed a case of bronchial asthma in which many types of therapy had been used with very little benefit. Histamine, peptone solution, defibrinated blood, tuberculin, typhoid vaccine, and foreign protein had all been used with no particular benefit to the patient. Dr. Giles stated that he was contemplating the use of hydrochloride acid intravenously in this

case. There have been instances in the literature where this procedure has been advocated and where it has been reported to have been of value.

A case diagnosed as bronze diabetes or hemachromatosis was shown. The pathology in such a case consists of fibrosis of the pancreas, diabetes mellitus, cirrhosis of the liver, and bronze pigmentation of the skin. The condition is rather uncommon; less than 150 cases have been reported. The duration of life is said to be ten or fifteen years after onset. Under insulin therapy the bronzing is said to be clearing up. A remarkable occurrence in this patient, as reported

by Dr. Giles, is that with an overdose of insulin the blood sugar fell from a value of 332 milligrams to 12 milligrams without any hypoglycemic reaction.

The third case shown was a typical picture of Malta fever in a young white female. Positive agglutination had been obtained in this case, and small transfusions had been used with very good results.

Another patient, a young white female, had had headaches for two or three years. Her systolic blood pressure was 210. There was some dyspnea and precordial pain. In September, while her blood pressure was 230/120, her non-protein nitrogen had been 30 milligrams and the PSP had been 45. The examination of the heart was negative for any abnormalities. An electrocardiogram had shown evidence of coronary occlusion or pericarditis. The urine examination was negative except for an occasional cast. After rest in bed she was discharged, and after remaining at home for about two weeks she returned to the hospital because of precordial pain. At the time of admission the blood pressure was 230/130. The blood chemistry showed no non-protein nitrogen retention. The PSP was 60 per cent and the Mosenthal concentration test showed a variation of the specific gravity from 1.005 to 1.010. The heart was enlarged and there was a loud systolic mitral murmur. The patient was receiving a low protein diet with symptomatic treatment and rest. The question in the case was as to whether or not this was a case that could be included under the heading of essential hypertension.

Dr. Granger discussed the asthma case from the point of view of the roentgenograms of the sinuses that were shown. Drs. Love and Hull discussed the problem of hypertension and nephritis and the relation between the two. Dr. Von Haam suggested the possibility that this case might be included in the category of those individuals who have small arteries as a congenital abnormality and increased calcium deposits which might account for the hypertension.

Three cases of hyperthyroidism were presented by Dr. Love. The first case was complicated by auricular fibrillation. The second case was being prepared for operation with Lugol's solution. These two cases were discussed from the point of view of endocrine dysfunction. The relationship between the ovarian function and thyroid function was discussed. The first patient had had an artificial menopause produced and the second patient had uterine fibroids.

Dr. Ashman discussed the electrocardiographic findings in hyperthyroidism stating that there were no typical electrocardiographic changes in such cases.

There then followed a pathological demonstration conducted by Dr. Von Haam, who first showed a case which had died as a result of acute dilata-

tion of the right heart. The clinical diagnosis had been CNS lues, hypertension, and questionable peptic ulcer. The second case was one of Laennec's cirrhosis of the liver, with a huge hypertrophied heart, cirrhotic spleen, and small aneurism of the aorta.

The business meeting followed this scientific section, and the election of officers resulted as follows: Chairman, Dr. W. A. Love; Vice-Chairman, Dr. Upton Giles; Secretary, Dr. Shushan. All selections were unanimous.

Willard R. Wirth, M.D.

TOURO STAFF MEETING

On December 14, 1932, Dr. Urban Maes presided over the regular monthly meeting of the Touro Staff.

Dr. Hilliard Miller presented the case histories of two unusual obstetrical complications.

The first case, a young white female, aged 23, was seen in November at the onset of labor, when the cervix showed one finger dilatation and some hemorrhage. Examination at that time showed a marginal placenta praevia. She was admitted to the hospital and a bag with weights was attached. Bleeding was controlled shortly and the patient went into active labor. That afternoon the patient was delivered of a breech presentation. There was considerable hemorrhage after the delivery and the patient was shocked. The hemorrhage was controlled and the patient improved slightly. The same evening a transfusion of 600 cc. of whole blood was administered. Following an infusion prior to the transfusion the patient's temperature rose to 105°. This rise of temperature was attributed to the administration of glucose in the infusion. On the third day after delivery there was another rise of temperature to 105° with a chill. Because of the presence of pus in the urine the patient was cystoscoped, but this examination was negative. Intermittent temperature continued with elevations as high as 106°. Secondary anemia developed requiring several transfusions. The patient was fairly comfortable between these irregular intervals of high fever. Two blood cultures were made. Polyvalent anti-streptococcal serum was administered with some improvement temporarily. At the end of the third week a vaginal examination giving presence of some exudate in the left broad ligament but no fluctuation was made out. It was considered that the patient had an abscess in the broad ligament. In another week this condition subsided. No thrombosed veins could be palpated. The condition was diagnosed as being due to a thrombophlebitis in the pelvic veins, and one month after delivery a laparotomy was done under spinal anesthesia. The left ovarian vein was found to be thrombosed about the size of a walnut. This was tied off. The hypogastric veins were also found to be thrombosed and they

were also tied off. In five days the temperature became normal by lysis. Since this time the patient has had another normal labor. The question arises as to the choice or necessity of surgery in such cases. The consensus of opinion seems to be that it is best to wait until the condition becomes chronic before surgery is attempted. The thrombosed veins are not to be removed, simply to be tied off. In seventy-five per cent of the cases the ovarian veins are the ones involved, particularly on the left side. There has been a reported mortality between eighty and one hundred per cent without surgery, and a mortality of 21.4 per cent with surgery. In reviewing the statistics, Dr. Jeff Miller tabulates the mortality with surgery at 33.9 per cent.

In the discussion which followed, Dr. Tyrone stated that he has seen five such cases. One case died of embolism one month after operation, even though it was an ideal case for operative procedure. Another case, also ideal, died five days after operation of some unknown cause. He stressed the importance of the selection of the ideal case. Dr. Wills added to the discussion by mentioning a case which he had seen. This case had peritonitis at the time of operation, however, because the infection had already begun to break through the thrombosed veins. Dr. Rives stated that the infection had been shown to spread in the lymphatics around the veins so that the infection really extends beyond the thrombosis. This condition at least is present in the superficial veins of the leg, and a similar condition probably exists in the pelvic veins. Drs. Lemann, Maes and Heninger also discussed this case.

The second case, an obstruction of the bowel during the eighth month of pregnancy, was that of a young woman who began to have some abdominal discomfort at about the sixth month of pregnancy. This discomfort was located over the fundus of the uterus and nothing unusual could be found upon examination. It was thought that this discomfort was due to excessive uterine contractions. When the patient was about seven and one-half months pregnant she began suddenly to complain of severe abdominal cramps one morning after having eaten watermelon the previous evening. The uterus was very active and the possibility of beginning premature labor was considered. The examination had not substantiated this thought however. The patient was instructed to take an enema and some paregoric. There was no distention at this time. A few days later the patient reported again, stating that the discomfort was still present and she had been vomiting all that morning. An enema had given no relief. When seen at this time she was markedly distended and her temperature was 100°. There was a scar on the abdomen from a myomectomy performed fourteen months previously. A tentative diagnosis of intestinal obstruction was

made, and the patient was removed to the hospital. Roentgenological examination confirmed this diagnosis. Upon laparotomy an obstruction was found about three feet from the ileocecal valve. Two loops of intestine were bound by adhesions to the posterior wall of the uterus. About six to seven inches of intestine were included in this obstruction. The adhesions were released and the bowel wall looked quite black. Hot towels were used and the color of the intestinal wall was greatly improved. The arteries were palpable. Some thrombosis was noted in the veins of the mesentery. Nothing further was done except an enterostomy. On the third post-operative day the patient had what was thought to be a shower of emboli to the base of the left lung. This was improved greatly in twenty-four hours by the use of the oxygen tank. She then delivered a seven-pound fetus which died almost immediately after birth. Dr. Miller ventured the opinion that the considerable use of morphine necessary in this case had probably killed the baby. The patient went on to a complete recovery.

In discussing the case Dr. Miller stated that the intestinal obstruction in pregnancy was rare. In one report only one had occurred in 15,000 pregnancies. One author had been able to collect only thirteen such cases in all the British and American literature from 1900 to the present. He furthermore stated that he did not think that uterine section should be done at laparotomy for intestinal obstruction. Practically all such obstructions have been due to previous pelvic operations and the discomfort arising has been progressing as the uterus rose in the abdomen.

Dr. Rives discussed the difficulty of a diagnosis. He also mentioned the investigative work which has shown conclusively that infection spreads through the bowel wall after it has been damaged by obstruction. For this reason a uterine section would certainly be most hazardous under such circumstances. He stressed the danger of adhesions by strands of fibrous tissue allowing some movement of the intestinal coils. Dr. Landry discussed a case which he had observed in which acute intestinal obstruction developed post-operatively to an extra peritoneal operation for a ureteral stone. This was found to be due to a previous appendectomy. Dr. Tyrone stated that he has seen three cases of intestinal obstruction following myomectomy. He stated that there have been cases reported in which the obstruction is due simply to the pregnancy by pressure of the uterus, without any previous operations. He remarked upon the fact that such occurrences are rather rare, considering the position of the sigmoid colon in relation to the brim of the pelvis. In closing the discussion Dr. Miller emphasized the importance of extra care in the performance of myomectomy to avoid adhesions.

Dr. Lucian Landry discussed two cases in which

he had performed an open reduction of the humerus, using Parham-Martin bands in both cases. The radiograms shown demonstrated the excellent results obtained.

Dr. B. C. MacLean, Superintendent of Touro Infirmary, presented a summarized discussion of a group hospital plan. This plan offers hospital service for a maximum of twenty-one days each year at a charge of \$6.00 a year. Such a plan is open to employees in groups. It is not practicable in very low wage groups. A free choice of physician is allowed. Dr. Graffagnino discussed such a plan, stating that in the City of New Orleans there were 150,000 people who belonged to various organizations supplying medical attention. Most of these organizations charge about fifty cents a month for such membership. It has been estimated that the average pay of the physician is about eight cents per house visit in such organizations.

Following this discussion the Superintendent announced that an anonymous donor had given a Drinker respirator to the hospital. This apparatus is to be set up at Touro for use by any one in New Orleans or Louisiana. No charges are to be made for this service as specified by the donor.

Dr. Maes briefly summarized the case histories of three fatal cases during the past month. One was a fourteen-year-old child who had died of cavernous sinus thrombosis following a furuncle on the upper lip. This furuncle had been incised at another hospital prior to his admission to Touro. Liberal discussion followed this case, entered into by Drs. Landry, Lanford, and Maes. Dr. Maes stated that recently one surgeon has advocated the early division of the angularis vein with the thermocautery in such cases. This man had reported twelve cases so treated with one hundred per cent recovery.

Dr. Maes mentioned that three cases had died from gangrenous appendicitis during the previous month. One of these cases had received two purgatives in the other case there had been a definite delay; and in the third case there had been no mention as to time interval or purgation. He stated that the interest in appendicitis had been again revived because of the increasing mortality, and that the two important considerations in any study of this subject were purgation and time interval.

Willard R. Wirth, M.D.

FRENCH HOSPITAL

The regular monthly meeting of the French Hospital Staff was called to order Thursday, November 10, 1932, at 8 P. M., Dr. H. B. Alsobrook presiding. The meeting was called to order and the secretary read the reports of discharges and deaths. The following cases were opened to general discussion: (1) Ventral and Inguinal Hernia

with Fecal Fistula; (2) Acute Encephalitis; (3) Toxemia, Dental Caries, Hypertension, Hemorrhoids, and (4) Peritonitis following supra-vaginal hysterectomy. Drs. Anderson, M. O. Miller, Harr's, M. J. Lyons, C. J. Brown and Alsobrook discussed these cases.

Dr. J. B. Gooch then reported an interesting and unusual case of acute maxillary sinusitis. The patient complained of pain and swelling of the right side of the face for two days duration following a slight cold. She also gave a history of frequent colds and of having been struck in the right side of the face three months previously. Roentgenograms showed a linear fracture of the right maxilla extending into the orbit. There had been an acute exacerbation of a chronic sinus infection with extension through the fissure into the cellular structure of the cheek.

The case was treated conservatively for 24 hours but the patient was suffering so severely and begged that surgical intervention be begun. Therefore a large nasal antrum opening was made and a retention catheter left in place. She was also given 1 cc. of catarrhal immunogen daily and gentle irrigations daily. Four days later she left the hospital much improved as the pain and swelling and redness had subsided. Dr. Gooch pointed out that the E. N. & T. surgeons have the same hesitancy about surgery in acute sinusitis as the general surgeon has in regard to infections of the face.

The chairman then presented Dr. P. A. McIlhenny who spoke on "First Aid in Fractures." Most fractures may be treated conservatively and Dr. McIlhenny recommended the following procedure: 1. Examination should be made as early and as gently as possible avoiding all unnecessary manipulations. 2. Immediate support of the part in the position in which there is muscular relaxation. 3. Treat existing shock. 4. Roentgen ray examination then reduction as completely and gently as possible with a check by roentgen ray. 5. Apparatus applied—the simpler the better. When callous formation is present you may begin to massage and guarded movement of parts allowed. Rapidity of repair depends upon the blood supply.

All cases of compound fracture should receive tetanus antitoxin. The wound should be thoroughly exposed and the traumatized tissues excised. All hematoma should be carefully controlled and irrigated. The fracture should be fixed by wires, steel plates or screws, etc., and lavaged with ether or iodine. The wound may be then closed and the part supported by a heavy wire splint or some form of extension.

Dr. Alsobrook then announced election of officers and a round table discussion for the next meeting, and there being no further business the meeting adjourned.

Cuthbert J. Brown, M.D.

NORTHEAST MISSISSIPPI HOSPITAL, BOONEVILLE

On November 7 the staff of the Northeast Mississippi Hospital met in regular session. Dr. W. H. Anderson reported a case of hemangioma of the vulva in a ten-months-old baby, that was treated with radium with complete recovery, and two cases of ruptured appendicitis in small children.

At the December 5 meeting, Dr. W. V. Davis reported a case of acute anterior poliomyelitis in an adult female who was two months pregnant. Dr. R. B. Cunningham gave a paper on hypertrophied pyloric stenosis with case report.

R. B. Cunningham, M.D.

Booneville,
December 7, 1932.

ANDERSON INFIRMARY

The staff members of Anderson Infirmary of Meridian met in regular session Friday, October 28, at 7 P. M., with twenty in attendance. The meeting was called to order by the president, Dr. T. C. Cleveland. After a report from the records department and analysis of the work of the hospital for the past three months, the following clinic discussions were held:

1. General discussion regarding the American College of Surgeons.
2. Clinic.—Dr. T. L. Bennett. General discussion.
3. Report of case of Perforated Gastric Ulcer Drained through Pleural Cavity—Dr. W. Jeff Anderson.
4. Report of Perforated Gastric Ulcer—Dr. W. Jeff Anderson.
5. General discussions.

The regular monthly staff meeting of Anderson Infirmary was held Friday, November 25, at 6:30 P. M., with twenty-four members present. The meeting was called to order by the president, Dr. T. G. Cleveland. After report from the records department and analysis of the work of the hospital for the month of October, the following papers and reports were read:

1. The "Flu" Situation in Meridian—Dr. H. F. Tatum.
2. Report of death of a previous clinic.—Dr. H. H. Robinson.

Charles T. Burt, M.D.

THE VICKSBURG SANITARIUM

The regular monthly meeting of the Vicksburg Sanitarium was held on December 12 at 6:30 P. M. Officers for the year 1933 were elected as follows: President, Dr. L. J. Clark; Vice-President, Dr. W. E. Johnston; Secretary, Dr. L. S. Lippincott (re-elected). The president appointed Dr. G. C. Jarratt chairman of the program committee.

Special case reports:

1. Carcinoma of Cervix Uteri with Unusual Metastases—Dr. G. M. Street.

2. Carcinoma of the Urinary Bladder—Dr. A. Street.

3. Suspected Hemophilia—Dr. L. S. Lippincott.

4. Pregnancy Complicated by Carcinoma of Cervix Uteri—Dr. J. A. K. Birchett, Jr.

The next meeting of the staff will be held on Monday, January 9, at 6:30 P. M.

Abstract: Carcinoma of the Cervix Uteri with Unusual Metastases.—Dr. G. M. Street.

The patient, a white female, age 36, housewife and music teacher, was admitted to the hospital November 8, 1932.

Family History. Father died at age of 40 of chronic alcoholism; mother died at age of 45, cause unknown; one brother dead, cause unknown; one sister insane and in asylum; three sisters living and well.

Past History. Married eight years; has never been pregnant. Menstrual flow has always been scanty, only a slight stain for part of a day, from age of 16 up to ten years ago. Since an abdominal operation at that time, there has been no menstruation at all up to onset of trouble. No unusual diseases of childhood. Renal colic five years ago, no recurrence; tonsils removed many years ago; laparotomy ten years ago at which time patient states both tubes and ovary and appendix were removed. General health following operation excellent up to six months ago when present trouble began.

Present History. Complaints of pain in right lower quadrant, right hip, and back; swellings in groins, first appearing on right side and then on left. First symptoms appeared six months ago with sudden bloody vaginal discharge; no pain and no other symptoms at first. Cervix was cauterized by a surgeon. Some weeks later there was still a discharge and pain began in back and right side of pelvis. The same surgeon again treated the cervix. Pain gradually became worse and three months after onset swelling in right groin appeared, followed by swelling in left groin and a small lump above left clavicle. At this time patient was seen by another physician who came to her home and did a dilatation and curettage and packed the uterus. Symptoms continually grew worse, patient gradually losing weight and strength. Has been in bed most of time for past two months. States that her physicians have attributed most of her symptoms to "nerves".

At present there is marked aching in both lower extremities, especially the right; there has been fifteen pounds loss of weight; there is insomnia due to pain and poor appetite. The lump over left clavicle is larger and in the past week there has appeared another lump over the right clavicle. Very little vaginal discharge lately; takes douches frequently. There has been no fever, sweats, or chills, no headaches, no urinary symptoms, no

digestive disturbances other than anorexia and constipation.

Physical Examination. Well developed, well nourished young woman of a highly nervous type and excessively talkative. After taking a careful history one is definitely impressed with the fact that the patient very probably is a "neurotic" in addition to whatever is found of an organic nature. Just above the left clavicle and very deep, along the deep carotid sheath is a hard lump, about the size of a small pecan, moderately movable. There is a much smaller and more superficial hard, movable gland above the clavicle on the right side, at posterior border of sterno-mastoid muscle, about one inch above clavicle. The chest is entirely negative; abdomen flat and soft, no muscular rigidity or areas of tenderness except low on each side. On the right side there are deep masses palpable just above and to outer side of Poupart's ligament. On the left side there are much smaller masses which are more tender and appear somewhat more superficial. There is moderate muco-purulent vaginal discharge. The cervix is small, hard, irregular, and ulcerated about the external os. The whole cervix is no larger than the distal end of a man's thumb. Uterus and cervix are freely movable. The uterus is small, infantile in type, and the fundus is forward. No masses immediately lateral to uterus. Against right pelvic wall is large, hard, irregular mass. Against left pelvic wall, more anterior, is another irregular mass and apparently some tender lymph nodes.

Roentgenograms of pelvis and spine negative for bone lesions; chest negative.

Routine laboratory examinations of blood and urine negative. Blood Wassermann, Kline and Young, and Kahn tests, negative.

Specimen of tissue removed from cervix shows squamous cell carcinoma (Group IV). Nodes removed from above left clavicle shows squamous cell carcinoma (Group IV).

Comment. An interesting feature of this case is the fact that the patient is hopelessly incurable from cancer of the cervix and yet the uterus and cervix are very small and freely movable. Metastases are in the lateral pelvic glands, in the inguinal glands on the left, and in the deep glands of the neck. The node removed from the neck was intimately adherent to the left internal jugular vein.

ABSTRACT. Suspected Hemophilia—Dr. Leon S. Lippincott.

Patient. White male, school boy, age 12, was admitted to the sanitarium November 28, 1932, service of Dr. A. Street.

Present Complaint. Painful swelling of floor of mouth and submaxillary region, with inability to open mouth or to swallow. Two days ago, following a blow received in a football game, a slight swelling was noted in right submaxillary region.

Yesterday morning, swelling had increased, there was some pain, and there were ecchymoses in skin of neck. Patient was able to eat mid-day meal. In the afternoon swelling had so increased in sublingual region that swallowing was difficult and painful. Today condition has been worse with more swelling and more pain.

Past History. Edema and ecchymoses follow bruises; bleeds profusely for one to two hours from small cuts. Circumcision three days after birth caused such profuse hemorrhage that operation was not completed. Colitis with slight hemorrhages each summer for first three years of life. Five years ago, following pyelitis, epistaxis required blood transfusion. Extraction of teeth three years ago was followed by hemorrhage which necessitated several blood transfusions. Has had attacks of "rheumatism" in which joints became red, swollen and painful; associated with tonsillitis.

Family History. Maternal grandfather said to have been a "hemophiliac" and "almost bled to death several times." Father died of pneumonia at age of 37; mother, one brother and one sister living and well.

Physical Examination. Temp. 100.2°F.; pulse, 112, regular; respiration 26, regular; blood pressure 110/70. Well developed and nourished. Diffuse swelling in submaxillary and sublingual regions, more marked towards right side, tender and tense. Skin over swelling reddish sublingual to bluish-gray submaxillary. Floor of mouth swollen and tongue wedged against hard palate; unable to swallow. Systolic murmur at apex of heart.

Working Diagnosis. Hematoma of submaxillary and sublingual regions; possible hemophilia.

Clinical Laboratory. Blood, Hb. 77 per cent; erythrocytes 5,680,000; color index 0.68; coagulation time (capillary tube) 2 minutes; bleeding time 2 minutes, 45 seconds; platelets 450,000 (direct); leukocytes 9,200; small lymph. 19 per cent, large lymph. 2, monocytes 1, polymorph. neutrophils, mature 40, immature 31, polymorph. eosinophils 7. No malaria found. Blood group I (Jansky), IV (Moss). Step-father was found to be in same group and direct matching showed bloods compatible. Urine, marked acetone and diacetic acid; otherwise normal.

Treatment. 500 c.c. of 5 per cent glucose solution and 4 grains of calcium chloride intravenously; insulin to balance glucose; hot flaxseed poultices to lower jaw and neck.

Subsequent. The next morning patient could swallow and take soft diet. Temp. 99.4°F.; pulse 110; resp. 20. Temp. 101.4°F. at 6 p.m.; always thereafter below 100°F. Pulse varied from 90 to 100 and respiration remained at 20.

On November 30, examination of mouth showed teeth in poor condition and underdeveloped; one temporary canine still present; gums dirty; tonsils chronically infected.

Blood. Hb. 77 per cent; erythrocytes 5,830,000; color index 0.66; coagulation time (capillary tube) 4 minutes; coagulation time (blood from vein) 14 minutes, 30 seconds; bleeding time 1 minute, 30 seconds; platelets (direct) 302,000; reticulocytes 0.65 per cent; leukocytes 6,700; small lymph. 26 per cent, large lymph. 4, monocytes, 3; polymorph. neutrophils, mature 32, immature 31, polymorph. eosinophils 4. No malaria found. Wassermann, Kline and Young and Kahn tests negative. Clot retraction time 3 hours, 45 minutes; prothrombin time 17 minutes; calcium time 9 minutes, 15 seconds; serum calcium 7 mg. per 100 c.c.

Roentgenograms of lower jaw showed no abnormalities.

Improvement was rapid and patient was discharged from hospital on December 3, 1932.

DISCUSSION

This patient had been considered a hemophiliac. In favor was the history of excessive bleeding in the maternal grandfather, with no tendency to bleeding in the mother. Also in favor was the history of profuse bleeding in the patient. The coagulation time of blood from vein was moderately prolonged, as was the "prothrombin time."

Against hemophilia was the fact that the coagulation time of blood from a vein in hemophiliacs is usually one to five hours or longer and the "prohibition time" is five to 25 times the normal. The serum calcium was diminished in this case. It is interesting to note that the coagulation time by the capillary tube method was normal on two different occasions, which shows the unreliable results that may be obtained when a skin puncture method is used.

The normal platelet count, bleeding time, and clot retraction rules out purpura hemorrhagica.

The tendency to bleed in this case is probably due to a deficiency in calcium. It is borne out by the fact that addition of calcium to the blood in the determination of the calcium time produced normal coagulation time; that the teeth are poorly developed; and that there was rapid clinical improvement following the administration of calcium. It is apparently not a case of true hemophilia.

HOTEL DIEU

The regular monthly meeting of the Hotel Dieu Medical Staff was held on Monday, November 21, 1932 at eight P. M., Dr. J. A. Danna, President, presiding, and Dr. J. E. Isaacson, Secretary, at the desk.

I. Dr. P. L. Thibaut presented a case of "Dystocia from Retrodisplacement of the Left Forearm, Complicated by Prenatal Sub-Glenoid Dislocation of the Left Shoulder." He stressed four points of special interest:

(a) The unusual anomaly of attitude; the child's left forearm was wrapped around the back of its neck. When attempts to dislodge it were

unsuccessful, version was done, but with difficulty owing to the size of the fetus and inability to bring down both feet before turning.

(b) The necessity of invading the uterine cavity for proper appreciation of the conditions presenting. Neglect of this complete examination might lead into the error of using pituitrin, or resorting to forceps to finish the delivery; either of these procedures might prove disastrous—to the mother by possible rupture of the uterus—to the child by mutilation.

(c) Version and extraction is the method of choice.

(d) As far as can be ascertained, this is the first case of retrodisplacement of the forearm complicated by dislocation of the shoulder.

Dr. J. E. Landry lauded the superiority of version over forceps for most cases.

Dr. E. H. Walet stressed the importance of early diagnosis.

Dr. G. Anderson stated that he believes the dislocation of the humerus downward (sub-glenoid) shortened the distance there, and thereby took traction off the plexus which otherwise would have been tremendously stretched; that probably saved the child from paralysis of the arm, which might or might not have been permanent.

In closing, Dr. Thibaut stated that the inability to reduce the anomaly was due to a pre-natal dislocation of the left humerus, which was brought about by the elevation of the elbow which rested on the horizontal ramus of the pubis and was eventually dislocated by the forceful contractions. The position was O. D. A. Spontaneous delivery in such cases is possible only where the pelvis is roomy and the child small. In this case the child was large; beside, it was impossible to make any diagnosis from external manipulation, for the mother was very obese.

The danger of infection from intrauterine examination is negligible; in three hundred versions, Dr. Thibaut has not had a single case of postpartum infection following version.

II. Dr. Dan Silverman presented a paper entitled, "A Consideration of Our Present Knowledge Concerning the Pancreatic Ferments," summary of which follows:

The determinations of pancreatic digestion from analyses of duodenal contents have proven the necessity for examining all three enzymes. Under normal conditions, even in the fasting state, the duodenal juice contains a secretion with appreciable activity of pancreatic enzymes.

The enzymes differ individually in their responses to certain ingested food substances. It is most noticeable that, in addition to being the most stable, the starch-splitting principle shows little inclination to respond to the ingestion of starch. Protein more than any other one type of food apparently excites all three enzymes.

The application of this knowledge to the study

of pancreatic disease and its treatment is essential. Enzymes may be considerably diminished but one does not depend upon a diarrhea as a necessary symptom. When there are clinical manifestations of inhibition of pancreatic digestion one is able to infer that certain enzymes are at fault, and the proper diet to compensate for this loss must be instituted. Pancreatic disease is usually associated with diminution of enzymes.

It is essential that study of the pancreatic ferments be supplemented by examination of the feces.

Dr. Aldea Maher: Pancreatic digestion is a most important subject, for though starch digestion takes place in the mouth and protein digestion in the stomach, there are facilities to take care of all digestion in the duodenum. I am impressed by the fact:

1. That "proteins stimulate all the pancreatic enzymes and even the ingestion of starch cannot stimulate the pancreatic amylase to activity." This shows the necessity of protein in the diet and the inadvisability of placing patients on long continued protein-low or protein-free diets.

2. "The stimulating effect of olive oil on all pancreatic enzymes." Fats and oils are most important in the diet. The mineral constituents are better absorbed in the presence of oils. Perhaps this accounts for the common lay belief that olive oil cures gall bladder disease and dissolves gall stones. There may be no gall bladder disease, but instead a pancreatic indigestion. Or there may be actually some relationship between gall stones and oil, because Ivy recently has done some experiments in which he placed human gall stones in the gall bladder of a dog, and the gall stones dissolved. The dog's diet is high in fat.

3. "In gastric achylia, there may be perfectly normal pancreatic secretion" and though the patient has no gastric digestion he may receive full diet of carbohydrates, proteins and fats, since the pancreas takes care of a full diet. It is thought also in the opposite condition, hyperchlorhydria, that the excess of hydrochloric acid in the stomach is due rather to a decrease of pancreatic secretion than to an actual increase of the hydrochloric secretion, the pancreatic secretion failing to neutralize the excess of hydrochloric acid by regurgitation.

Unfortunately we have no functional tests for this important organ, the pancreas. No dye so far has been discovered which is secreted exclusively by the pancreas. The various enzyme tests have been found unreliable. The attempts to obtain the fat digestion by fat meals and fat determinations of feces are tedious and unsatisfactory. The analyses of the feces for free muscular fibres and fat is the only possible test at present and it is surprising how few requests are received for this examination, when we realize the pancreas is one of the most important organs of the body.

Dr. S. Chaille Jamison: It is regrettable that no test has been perfected to show the difference in response of the various ferments of the pancreas; testing for amylase in the blood and the urine has little or no value because it is not a true index of pancreatic efficiency.

At the recent Southern Medical meeting, I was glad to hear the speakers attribute pancreatic failure in tuberculosis to toxic phenomena. In dealing with tuberculosis, it is this that gives the greatest trouble. At that meeting Dr. Eusterman brought out the difficulty of diagnosis, especially in the absence of icterus, stressing that carcinoma of the pancreas is a common disease. Dr. Baker stated that everything else that could cause pain in the abdomen must first be excluded before diagnosing. The pain he said, radiates to the left. He stressed the importance of determining glucose tolerance.

III. Dr. Jerome E. Landry reported a case of "Malignant Ulcerative Endocarditis," history of which follows:

The patient, aged 42 years, father of five children, gave a history of rheumatic fever at the age of twelve years. The present illness was of two weeks duration, with chills and high temperature, for which he had taken mild gripe remedies. Examination (April 26) showed a few rales in the chest and an enormously enlarged heart with murmurs. He had a dry cough and temperature. Blood examination showed 20,000 leukocytes with 69 polymorphonuclears; culture showed staphylococcal infection. He was put to bed with a diagnosis of ulcerative endocarditis.

From May 12 to 25 his temperature ranged from 99 to 104. When staphylococcus immunogen injections were begun, the chills stopped, the temperature dropped, and patient showed great improvement. Dr. Jamison saw the case and concurred in the diagnosis. He advised seeing a dentist who removed several teeth; after this patient could not eat for a few days, and began to grow worse. Little petechial hemorrhages appeared around the joints, which were painful. Severe pain developed in the left kidney, followed by hematuria. There was also excruciating pain in the abdomen. On July 31, while eating dinner, he suddenly became unconscious—paralyzed in the left side. In a week this cleared up, but temperature and chills continued; purplish spots appeared on tips of fingers and toes. Staphylococcus immunogen was continued. On September 27 he developed retention of urine; catheterization produced 1500 c.c., and on each day thereafter about 1 quart. On October 1, there was a syncope with return of all symptoms, and he died the same night. There was no autopsy, but the heart was obtained for laboratory study.

Drawings of the heart were shown on the screen; they revealed extensive areas of ulceration and calcareous deposit. Roentgenogram showed the enor-

mous size of the heart—almost to the cage of the thorax; also a large plaque of calcereous deposit.

Dr. Aldea Maher demonstrated microscopic slides of the tissue, and called attention to the definite localized area of inflammation. There was also an old scar, the remnants of just such a condition as this present acute condition.

Dr. S. C. Jamison: We often see in children bacterial endocarditis which does much damage and burns itself out, leaving a residue of calcereous deposit through myocardium and valves. When these children grow to maturity, they have endocarditis, myocarditis and pericarditis, and they are particularly vulnerable to any organism travelling in the blood stream. They may be left with permanently damaged valves or an obliterative pericarditis which becomes adherent to everything about it. The involved structures in front of the heart undergo atrophic reaction, anchoring the heart, as it were, to the bony structures. These patients may go through life with damaged valves and with a certain number of murmurs. On the other hand, if the myocardium is seriously damaged, whether the valves are or not, such patients will succumb in a short time.

If the valves escape, or are not too seriously damaged, but the pericardium is adherent all about, then we have the condition of a bag too tight for the heart to dilate well; since it has to work against a great deal of anchorage, it is going to

enlarge; if the sac cannot enlarge with it, the heart will fail; if the sac enlarges, there is danger to the surrounding structures. We can do a great deal for such patients by surgery—resect the ribs and free the heart from its anchorage. If there is an acute myocardium these patients do remarkably well. A decortication is not necessary.

There is no condition that causes terrific enlargements of the heart more often than chronic obliterative pericarditis. We must think of this when we get a history of rheumatic heart disease and a big heart with retraction.

The patient with bacterial endocarditis may have had no heart disease previously. He develops chills, fever, a peculiar chocolate color of the face (which, by the way, is almost diagnostic) and general embolic phenomena—discoloration of hands and feet with painful areas; also a loud mechanical murmur, particularly at the apex. Not until late, if ever, do we find congestive heart disease.

Any of a vast group of organisms may cause bacillary endocarditis. Sometimes gonorrhea, affecting the aortic valve; more frequently streptococcus viridens (not a very virulent organism). Straphylococcus, also occasionally found, is invariably a killer. The only thing to be done is repeated small transfusions; this gives some relief.

J. E. Isaacson, M.D., Secretary.

TRANSACTIONS OF ORLEANS PARISH MEDICAL SOCIETY

CALENDAR

January 2—Eye, Ear, Nose and Throat Staff, 8 P. M.

January 4—Clinico - Pathological Conference, Touro Infirmary, 10:30 A. M. to 11:30 A. M.

January 6—Pathological Conference, Hotel Dieu, 11 A. M. to 12 noon.

January 6—Physiology Seminar, Tulane Medical School, 5 P. M.

January 9—Orleans Parish Medical Society. Installation meeting, 8 P. M.

January 11—Touro Infirmary Staff, 8 P. M.

January 11—Clinico - Pathological Conference, Touro Infirmary, 10:30 A. M. to 11:30 A. M.

January 13—French Hospital Staff, 8 P. M.

January 13—Pathological Conference, Hotel Dieu, 11 A. M. to 12 noon.

January 13—Physiology Seminar, Tulane Medical School, 5 P. M.

January 16—Hotel Dieu Staff, 8 P. M.

January 17—Charity Hospital Medical Section, 8 P. M.

January 18—Charity Hospital Surgical Section, 8 P. M.

January 19—Clinico - Pathological Conference, Touro Infirmary, 10:30 A. M. to 11:30 A. M.

January 19—Eye, Ear, Nose and Throat Club, 8 P. M.

January 19—New Orleans Hospital Council, City Hospital, 8 P. M.

January 20—Pathological Conference, Hotel Dieu, 11 A. M. to 12 noon.

January 20—Illinois Central Railroad Hospital Staff, 12 noon.

January 20—Physiology Seminar, Tulane Medical School, 5 P. M.

January 20—Mercy Hospital Staff, 8 P. M.

January 23—Orleans Parish Medical Society, 8 P. M.

January 24—Baptist Hospital Staff, 8 P. M.

January 25—Clinico - Pathological Conference, Touro Infirmary, 10:30 A. M. to 11:30 A. M.

January 27—Pathological Conference, Hotel Dieu, 11 A. M. to 12 noon.

January 27—Physiology Seminar, Tulane Medical School, 5 P. M.

During the month of December besides the meeting of the Board of Directors the Society held two meetings. On December 12 at the Scientific Meeting the following program was presented:

The Use of Thymophysin and similar preparations in Obstetrics, by Dr. Edward L. King.

Discussed by Dr. T. B. Ayo.

The Cardio-Renal Death Rate of New Orleans, by Dr. A. E. Fossier.

The Treatment of Menstrual Disorders by the Injection of Blood from Pregnant Donors. A Preliminary Report, by Dr. J. Thornwell Witherspoon.

Discussed by Dr. H. E. Miller.

The Secretary announced that the following officers had been elected to serve during 1933:

President—Dr. Edward L. King.

First Vice-President—Dr. Waldemar R. Metz.

Second Vice-President—Dr. W. R. Buffington.

Third Vice-President—Dr. Theodore F. Kirn.

Secretary—Dr. Frederick L. Fenno.

Treasurer—Dr. W. P. Gardiner.

Librarian—Dr. Alton Ochsner.

Additional members Board of Directors:

Dr. Gilbert C. Anderson, Dr. Val H. Fuchs, and Dr. John A. Lanford.

At this meeting the resolution introduced at the meeting of November 28 whereby the dues for Active Members would be reduced from \$18.00 per annum to \$12.00 per annum was finally acted on and passed. Therefore the dues for Active Members for 1933 will be \$12.00 per annum payable quarterly in advance, and you are requested to send in your check at once plus your annual dues for the Louisiana State Medical Society. Your Medical Defense does not begin until your dues in the State Society are paid. **SEND IN YOUR CHECK AT ONCE.**

The seventh Stanford E. Chaille Memorial Oration was delivered by Dr. Joseph Colt Bloodgood of Baltimore on Monday, December 19. Dr. Bloodgood's subject was, "What Every Doctor Should Know About Cancer with Special Reference to Skin, Oral Cavity and Cervix" (Lantern slides).

Dr. Bloodgood was in New Orleans several days giving lectures and demonstrations at the Miles Amphitheatre, Charity Hospital and at the Hutchinson Memorial. These lectures were given particularly for Pathologists, Dentists, Nurses and Roentgenologists. All meetings were exceptionally well attended.

On December 8 the Committees appointed to consider the various phases of medical abuse met and presented reports. Since this question was one that had to have more time for consideration and action the Committees were instructed to continue their work.

The Secretary's office has been very busy during the month working with the Chairmen of these committees.

The following Delegates and Alternates to the Louisiana State Medical Society were elected for a term of two years at the meeting held November 28. The President, Dr. E. L. King, will serve only during his term of office, taking Dr. Landford's place who was President in 1932.

Delegates

Dr. Frank J. Chalaron
Dr. Frederick L. Fenno
Dr. H. W. Kostmayer
Dr. John A. Landford
Dr. Leon J. Menville
Dr. S. M. Blackshear
Dr. H. B. Gessner
Dr. C. Grenes Cole
Dr. M. J. Lyons
Dr. John Signorelli
Dr. P. Graffagnino

Alternates

Dr. J. A. O'Hara
Dr. Leopold Mitchell
Dr. I. M. Gage
Dr. Amedee Granger
Dr. J. E. Landry
Dr. E. L. Leckert
Dr. Val H. Fuchs
Dr. M. O. Miller
Dr. H. B. Alsobrook
Dr. Arthur Caire, Jr.
Dr. Lucien A. LeDoux

During the recent influenza epidemic the various charity organizations called upon the Society for aid. Twenty calls were received and doctors were sent. We wish to particularly thank the following members who went on calls on volunteered their services:

Drs. Geo. C. Battalora, L. L. Rabouin, L. J. Hances, C. J. Brown, J. R. Daboval, L. R. DeBuys, D. A. Lines, Geo. D. Feldner, David Hyman, M. J. Duffy, E. B. Gill, P. J. Saleeby, Russell, H. B. Gessner, M. D. Haspel, L. N. Elson, T. S. Kavanagh, Ada S. Kiblinger, A. H. Letten, Frank Gallo, D. L. Watson, and W. W. Butterworth.

It is with regret that we report the death of one of our most active members, Dr. Henry Daspit.

TREASURER'S REPORT

ACTUAL BOOK BALANCE.....	\$ 353.48
Receipts	880.63
	<hr/>
	\$1234.11
Expenditures	389.18
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ACTUAL BOOK BALANCE.....\$ 844.93

LIBRARIAN'S REPORT

There have been 177 volumes added to the Library during November. Of these 15 were received by purchase, 16 from the New Orleans Medical and Surgical Journal, 36 by gift, and 110 by binding. New titles of recent date are listed below.

It is gratifying to note that the members of the Society are availing themselves of the evening hours in the Library more and more. A telephone call to Miss Marshall during the day will result in material being placed ready for a doctor, for use in the evening at any time.

References have been collected on the following subjects during November:

Tumors of pericardium.
Formula for preparation of "Udga".
Sister Maria Therese.
Florence Nightingale.
Personal bibliography of Dr. Homer Dupuy.
Personal bibliography of Dr. John Signorelli.

Personal bibliography of Dr. Henry Blum.
Intracranial hemorrhage.
Appendix as a focus of parasitic infection.
Luetic infection resulting from blood transfusion.

The furnishing of several names of local men who are members of the American Association for the Advancement of Science.

Harvard oarsmen.

Hypernephroma.

Hereditary glandular disease.

Hemorrhage in pelvic inflammatory disease.

Cerebrospinal rhinorrhea.

Hemoptysis.

Elliott method of treatment in pelvic diseases.

Names and addresses of American foundations furnishing foreign fellowships.

NEW BOOKS

Lewis—Practice of Surgery. 12 v. 1932.

A. M. A.—Directory—Supplement to 12th ed. 1932.

Jarcho—Gynecological Roentgenology. 1931.

Van de Velde—Ideal Marriage. 1932.

Wells—Chemistry of Tuberculosis. 1932.

Dickinson—Control of Conception. 1932.

Newsholme—Medicine and the State. 1932.

Musser—Internal Medicine. 1932.

Lattes—Individuality of the Blood. 1932.

Crile—Diagnosis and Treatment of Diseases of the Thyroid Gland. 1932.

Peters and Van Slyke—Quantitative Clinical Chemistry. v. 2. 1932.

Surgeon-General's Office—Index-Catalog v. 10, Series 3. 1932.

Milbank Memorial Fund—Report. 1931.

Rockefeller Foundation—Annual Report. 1931.

Fried—Primary Carcinoma of the Lung. 1932.

Kelly—Electrosurgery. 1932.

Schnek—Technique of the Nonpadded Plaster Cast. 1932.

White House Conference—Hospitals and Child Health. 1932.

Hyman—Failing Heart in Middle Life. 1932.

Engelbach—Endocrine Medicine. 1932. 3 v.

Schamberg—Treatment of Syphilis. 1932.

N. Y. City Cancer Commission—Cancer then and now. 1932.

H. Theodore Simon, M.D., Secretary.

LOUISIANA STATE MEDICAL SOCIETY NEWS

DR. L. J. MENVILLE HONORED

Dr. L. J. Menville, Past President of the Louisiana State Medical Society, and Head of the Department of Roentgenology of Tulane Medical School, was given a gold medal from the Radiological Society of North America for excellent achievements during the past year, when this organization met in Atlantic City last month. The medal was awarded to Dr. Menville, who, with his associate, Dr. Joseph N. Ane, for the first time visualized the lymphatic system by roentgen ray by means of thorium dioxide.

EAST BATON ROUGE PARISH MEDICAL SOCIETY

The annual meeting of the East Baton Rouge Medical Society was held in the Police Jury Room, Wednesday, December 14, 1932. A symposium on cancer was presented, at which the following men discussed cancer in relation to these specialties. Drs. C. A. Lorio, Urology; T. S. Jones, Surgery; H. G. Riche, Internal Medicine; L. I. Tyler, Pediatrics; C. Austin Weiss, Ear, Nose and Throat; Rufus Jackson, Eye; J. L. Bevens, Laboratory; T. J. McHugh, Gynecology and Obstetrics; E. O. Trahan, History; L. D. Landry, Dental.

The following officers were elected for the ensuing year: Dr. W. H. Pipes, President; Dr. Thos. L. Mills, Vice-President; Dr. Lionel F. Lorio, Secretary-Treasurer; Delegates to State Society,

Drs. Rhett McMahon, W. H. Cook, and Rufus Jackson; Alternates, Drs. F. O. Darby, C. Austin Weiss, and W. R. Eidson.

Rufus Jackson, M.D., President.

W. H. Pipes, M.D., Secretary.

EAST AND WEST FELICIANA BI-PARISH MEDICAL SOCIETY

The Bi-Parish Medical Society met in the Rist Hotel, Clinton, La. Election of officers for 1933 resulted as follows: Dr. E. M. Robards, President; Dr. C. C. Blakeney, Vice-President; Dr. E. M. Toler, Secretary-Treasurer. The scientific program consisted of excellent and learned papers by Dr. C. A. Weiss, Sr., and Dr. E. O. Trahan of Baton Rouge on the subjects of "Tuberculosis of the Eye, Ear, Nose and Throat" and "Bacterial Endocarditis: With Report of a Case." Both papers were freely discussed by members present. Drs. Bevans, Trahan and Miss Hermine Tate of the East Louisiana State Hospital were elected honorary members of our Society. A most excellent banquet was served by Mrs. August Rist.

Dr. S. L. Shaw, President.

Dr. E. M. Toler, Secretary

THE GASTRO-ENTEROLOGICAL SOCIETY

A joint meeting of the New Orleans Gastro-Enterological Society and the Hotel Dieu Staff was held at Hotel Dieu on Thursday, December 22, at 8 P. M.

The following program was presented:

1. The Treatment of Peptic Ulcers with Non-

specific Protein: Observations After One Year. By Dr. Donovan C. Browne.

2. Hepatic Changes in Certain Cases of Jaundice. By Chas. W. Duval.

3. Post Operative Treatment of Ruptured Appendix in Children: Report of Seven Cases with recovery. By Dr. Ruth G. Aleman.

Donovan C. Browne, M.D., Secretary.

Dr. H. W. E. Walther, head of the department of urology, Southern Baptist Hospital, New Orleans, has contributed Chapter II to "The History of Urology," his subject being "Neuroses and Functional Diseases of the Genito-Urinary Tract." This book, soon to be issued by the Waverly Press, of Baltimore, is being published under the auspices of the American Urological Association.

The American Association for the Study of Goiter, for the fourth time, offers Three Hundred Dollars (\$300.00) as a first award, and two honorable mentions for the best three essays based upon original research work on any phase of goiter presented at their annual meeting in Memphis, Tenn., May 15, 16 and 17, 1933. It is hoped this will stimulate valuable research work, especially in regard to the basic cause of goiter.

The First Award of the Hamilton, Ontario, Canada, 1932 meeting was given Donald McEachern, M.D., John Hopkins Hospital, Baltimore, Md., "A Consideration of the Mechanism of Hyperthyroidism Based upon Its Effect upon Cardiac and Skeletal Muscle."

JUNIOR MEDICAL OFFICER (INTERNE)

Applications for the position of junior medical officer (interne) must be on file with the Manager of the Fourth U. S. Civil Service District, Washington, D. C., not later than January 10, 1933..

The examination is to fill vacancies in Saint Elizabeth Hospital, Washington, D. C. Two types of internship are offered: (a) An accredited internship of two years (American Medical Association classification 1), and (b) A postgraduate internship in psychiatry of one year (American Medical Association classification 2).

INFECTIOUS DISEASES IN LOUISIANA

Dr. J. A. O'Hara, President of the Louisiana State Board of Health, in collaboration with the Treasury Department of the United States Public Health Service, has issued morbidity weekly reports, which briefly abstracted contain the following information. The most interesting feature of the weekly reports that were published this month is the tremendous number of cases of influenza that has been listed. Starting with the week ending November 26, there were 600 cases reported in that, the forty-seventh week of the year. On the next report of the following week, the instance of the disease had jumped to 1183,

and for the week ending December 10 there were 7149 cases reported, probably representing only a small number of the actual cases of the disease in the State, but also indicating very definitely the severity of the epidemic, which has spread throughout Louisiana. The report for the week ending December 17 showed that the epidemic was on the wane, 4945 cases, somewhat under 2000 less than the previous week, were reported. The other diseases in double figures that were noted in the week of November 26 were as follows: Thirty-two cases of diphtheria, 37 of gonorrhea, 14 of pulmonary tuberculosis, 94 of syphilis, 16 of scarlet fever, 14 of cancer, and also part of the evidence of the influenza epidemic, 49 cases of pneumonia. For the week ending December 2, the pneumonia cases had jumped to 62. There were also reported 46 cases of pulmonary tuberculosis, 34 of diphtheria, 16 of cancer, 18 of scarlet fever, and 19 of syphilis.

The week ending December 10, with the great increase in the influenza cases, gave a still further increase in the cases of pneumonia, 103 being reported this week. There were also listed the following important diseases: Forty-eight cases of cancer, 26 of diphtheria, 30 of malaria, 49 of tuberculosis, 12 of scarlet fever, 27 of syphilis, and 17 of typhoid fever. One case of poliomyelitis was reported from Lafayette Parish. For the week ending December 17, the number of deaths of pneumonia had fallen slightly as a result of the reduction of the number of cases of influenza, there being 99 reported this week. There was a considerable increase in the number of cases of whooping cough, 48 being listed as contrasted with 4 in the previous week. The other diseases which appeared in double figures were as follows: Twenty-six cases of diphtheria, 25 of syphilis, 22 each of tuberculosis and cancer, 14 of chicken-pox and of typhoid fever, and 12 of scarlet fever. Two cases of cerebro-spinal meningitis were reported from Orleans Parish.

HEALTH OF NEW ORLEANS

The Department of Commerce, Division of Vital Statistics, has issued the following weekly reports concerning the health of New Orleans. For the week ending November 19, there were reported 159 deaths, 99 white, 60 colored, with a death rate respectively for the three groups of 17.5, 15.4, and 22.8. The infant mortality rate this week was only 51, 35 for the white and 82 for the negro children. For the week ending November 26, the death rate had jumped considerably to 23.3, the rate for the colored being 36.9, and for the white 17.7. During this week there were 211 deaths distributed about equally between the two races. The infant mortality rate increased to 91 as a result of a rate of 163 in colored children. For the week ending December 3, undoubtedly due to the influenza epidemic, the death rate in New Orleans had jumped to 25.7, as a result of 233 deaths in

the city. There were 138 deaths in the white population, with the rate of 21.4, and 95 among the negroes, giving a rate of 36.2. The infant mortality rate went up to 108, largely because of the negro rate of 196.

WOMAN'S AUXILIARY NEWS

The State Press and Publicity chairman is in receipt of quite a nice account of what the Shreveport Auxiliary has been doing during the advent of Christmas.

The "flu" has been so very prevalent that none of the other Auxiliaries have responded to my request for news, but they promise to co-operate more frequently during 1933.

The following Shreveport news may inspire us to make new resolutions: "Christmas seals started work at the Pines Preventorium for children in April, 1929. Upon examining the children of a tuberculous mother placed at the Pines, tests showed that all five had been infected from close contact. Realizing that tuberculosis could never be controlled unless all children of tuberculous relatives were segregated and care and treatment given them to build up their bodies, the Preventorium was established and became a vital part of the Shreveport Tuberculosis League's work. (Taken from the Shreveport Times.)"

"The Woman's Auxiliary to the Shreveport Medical Society sponsors the educational and follow-up work of the Preventorium. Mrs. Arthur A. Herold is the capable chairman of this committee.

"Mrs. T. B. Tooke of Belcher, Louisiana, and Mrs. L. T. Bakes of Dixie, Louisiana, both members of the Shreveport Auxiliary, are chairmen and co-chairmen for the Christmas seal campaign in Caddo Parish.

"Members of the Auxiliary appear before the various Shreveport schools and colleges and present the seals for sale. The Pines Preventorium is the Shreveport Auxiliary's 'hobby'. Through the splendid effort of Mrs. Herold as leader and the willing cooperation of the Auxiliary, the work at the Preventorium goes on throughout the entire year. A splendid teacher for the children has been provided by the school board. One afternoon each week a member of the Auxiliary goes to the Preventorium and entertains the children with games, stories, or takes them for an automobile ride. They are always remembered on their birthdays with a cake.

"As Christmas is drawing near, the doctors' wives are planning to make them happy as well as healthy children."

CHRISTMAS PARTY

"The Christmas Party given by the Woman's Auxiliary to the Shreveport Medical Society at the Woman's Department Club was unique and beautiful with the spirit of Christmas carried out in every detail. The spacious rooms of the club

house were artistically decorated with silver smilax and blue candles. The card and games tables carried out the chosen scheme with silver tallies and score pads bearing Christmas greetings to the players. After spirited games, decks of silver and blue cards, artistically wrapped, were presented for high score at each table.

"The guests were then invited to the dining room for coffee. Silver smilax and lighted blue candles were beautifully arranged on the mantle and small tables. The oval coffee table was spread with a blue tulle ruffled cover over satin. From a pedestal in the center of the table, blue tapers in silver holders extended the length of the table. Banked at the base were sprays of silver smilax interspersed with blue and silver balls. The coffee services at either end of the table were presided over by Mrs. Thomas J. Smith and Mrs. I. F. Hawkins. The ices in the guise of snowballs and the fondant and mints in blue, further carried out the festive idea.

The hostesses for the lovely party were: Mmes. M. O. Hargrove, O. H. McIntyre, J. L. Ewing, I. F. Hawkins, Edward Knighton, T. B. Tooke, W. M. Scott, J. R. Stamper, W. S. Kerlin, P. R. Gilmer, J. D. Young, Thos. J. Smith, and C. S. Morris.

"About forty members of the Auxiliary enjoyed this delightful affair."

The splendid contribution from the Shreveport Auxiliary was sent in by Mrs. Sam Kerlin, to whom I am deeply grateful.

Mrs. Wiley R. Buffington,
Chairman, Press and Publicity Committee,
Woman's Auxiliary to the La. State
Medical Society.

DEATHS

ANTONY, GEORGE C., Alexandria, La.: Born in 1891. Graduated from the University of Tennessee in 1918. He was a member of the Rapides Par'sh Medical Society, Louisiana State Medical Society, and American Medical Association. Dr. Antony died in Oklahoma City, Oklahoma, on December 12, 1932. He is survived by his wife, a son, and a daughter.

KIBLINGER, ELLIOTT, New Orleans: Born in 1873. Graduated from the Memphis Hospital Medical College in 1897. He then entered practice at Jackson, Louisiana, and worked there until the world war, when he joined the medical corps with the rank of captain. After the war, Dr. Kiblinger came to New Orleans to make his home and take up a general practice. Dr. Kiblinger was a member of the Orleans Parish Medical Society and the Louisiana State Medical Society up to his retirement three years ago. He died in New Orleans on November 30, 1932.

MISSISSIPPI STATE MEDICAL ASSOCIATION NEWS

L. S. Lippincott, Editor

Jacob S. Ullman, Associate Editor

D. W. Jones, Associate Editor

A HAPPY NEW YEAR COMMITTEE ON CONSTITUTION AND BY-LAWS

This committee is beginning to feel as though it were composed of Forgotten Men. Last year the committee received a great many suggestions for changes in the Constitution and By-Laws, practically all of which were worth while. So far the committee has received only two suggestions this year. Before very long a meeting must be held in order to draw up its report to the Association. It is respectfully suggested and urged that those members who think that the present way of running the Association may be improved, or those who have any kick should send in their suggestions at once to

J. S. Ullman, Secretary.

Natchez,
December 7, 1932.

FREE DISCUSSION AND FAIR PLAY "Dear Mr. Editor:

"The resolutions of the Delta Society published in the December issue of the Journal are extremely interesting; especially when we remember that last spring, in the House of Delegates, no one would say a word in support of a resolution to provide a means for studying State Board activities.

"Now the Delta Society goes on record as wishing to curtail the activities of the Board in one of its most important and most justifiable procedures, and is desiring a full and complete discussion by the House.

"Let us discuss these resolutions of the Delta Society without partisanship and from the standpoint of fair play.

"The Delta Society proposes to have the Board do immunization work for paupers only, leaving to the private physicians those who are able to pay. Who is to determine this ability, or inability to pay? Why should a pauper be more entitled to service from a public servant than a man of means? Is not the man whose taxes help to support a public office as much entitled to the service of that office as one who pays no taxes? Like Hashimura Togo, 'I inquire to know.'

"In all fairness and honesty the Board cannot refuse to one citizen any service it grants to any other—irrespective of color, race, sex, age, wealth or previous condition of servitude. Also, it should limit itself to the control of communicable disease. Is it within bounds here? Unquestionably! Then more power to the Board!

"The question also arises, 'Can the Delta Soci-

ety come into court with clean hands?' Can it ask that the Board discontinue what is a well recognized public health procedure that hits the pocketbooks of private physicians, when these same physicians are encouraging the Board in expending public funds on another procedure, that is outside its province, but is for the convenience and benefit of private physicians?

"It is getting to be a matter of fairly common suspicion that the Board is being exploited by some physicians for their own convenience, which exploitation the Board permits in order to keep the good-will of the physicians. Select just one instance.

"From the last State Board report we learn that in two years the Bolivar County laboratory made 4,809 urinalyses and the report, describing the work of the laboratory says, 'Promptness and dependability make the laboratory a constant aid to the busy doctor.' It 'enjoys the confidence and is constantly used by ALL (caps mine) of the physicians of the county.' Of a total of 28,057 examinations made by this laboratory, more than one-sixth were urinalyses. Apparently Bolivar is running a laboratory for the benefit and convenience of its private physicians.

"The Humphreys report merely states that 'laboratory work has consisted of the examination of slides for malaria, urinalyses (locally).'

"Leflore is not so liberal as Bolivar—it reports only fifty urinalyses, and as it is laying some stress on maternity hygiene these may fall under that head and thereby be defended. But it does seem queer that there were only fifty urinalyses if 'Advice has been given to 357 expectant mothers,' 116 of whom came to the director's office for consultation. It has been a long time since I did any of this sort of work, but I was under the impression that urinalyses are made frequently in obstetrical practice. It doesn't look as if these women were getting the high class service advocated by the Board.

"Sunflower omits any reference to laboratory work in its report, though since it stresses prenatal hygiene it may be assumed that some was done. 'During the two years, 1708 prenatal examinations' were made. While not apropos of the subject, this interesting statement was made, '*Although the good accomplished by these clinics may be open to question, it can be said that they are extremely popular.*' (Italics mine.) This is quite an interesting confession, considering the claims that have been made.

"Washington apparently does not run a laboratory.

"Admitting that four of the five counties in the Delta Society do not get free laboratory service from their health units, it is rather evident that the physicians in the fifth (Bolivar) do; hence the question I have asked above: 'Can the society come into court with clean hands?'"

"But there is one of the resolutions I heartily endorse; the one calling for a full discussion. Let's have it. We all know that there is a lot of quiet, under-cover criticism of the Board's activities. Much of it is unjustifiable. We found that out here in the Issaquena-Sharkey-Warren Society more than a year ago, when we went into these matters locally, and I feel sure that pretty much the same condition exists throughout the State. And let's be fair about the matter. Fair to ourselves; fair to the Board—which is our own selection, and whose members are our own fellows; fair to the public—whose money the Board is spending and whose health is the Board's care. But let's have that free discussion the Delta Society is asking. Let's not tie the hands of our delegates by instructing them how to vote. Give them a free hand and trust to their honesty and judgment. That is the only way we can get anywhere."

E. F. Howard.

Vicksburg,
December 12, 1932.

FROM OUR SECRETARY

The following letters have been sent to the Secretaries of the component societies of the Mississippi State Medical Association by Dr. T. M. Dye, Secretary:

"To County Secretaries:

"My Dear Doctor:

"I am enclosing blank for your annual report to the State Secretary. Our By-Laws specifically provide that this report, accompanied by the annual dues, be made not later than February the first.

"This law has not been any too well observed in the past, and this failure has often caused embarrassment and chagrin to the members of the delinquent society.

"Through a ruling of the House of Delegates of the American Medical Association state secretaries must make reports to the national organization in March, or suffer in their representation in the national House of Delegates.

"The enclosed blank was prepared with great care and provides for information that the State Secretary must have. Please see that all information needed is given.

"Arrange your list of members alphabetically, using a typewriter where possible. In the column giving 'office in society' all that is required are 'Pres.', 'Sec.', 'Delegate'. The column for 'Remarks' is for use in the State Secretary's office, so please do not use this column. Kindly

note the blanks on reverse side of sheet and furnish the data required.

"I thank you for your helpful consideration in the past and assure you that it is greatly appreciated.

"Truly your friend,

"T. M. Dye, Secretary."

"My Dear Doctor:

"The Council recently passed the following resolution: 'Secretary Dye was requested to again remind the local societies, through their secretaries, that dues MUST BE PAID by February 1. Failure of a local secretary to file his report by February 1, automatically suspends that Society from membership until such report is filed, and the members thereof would be ineligible for defense by the Council during that interval. It is urged that dues be collected by January 1 as far as possible.'

"Cordially yours,

"T. M. Dye, Secretary."

"My dear Doctor:

"There has been prepared for presentation to the Mississippi Legislature a bill providing for the licensing of Chiropodists. Copies of this bill have been sent to the various county secretaries of the State Medical Association.

"This letter is just to call your attention to the usual procedure in such case of referring matters of this kind first to the Committee on Public Policy and Legislation, of which Dr. F. J. Underwood, Jackson, is Chairman.

"This is always a safe and sane method of procedure, and I concur in the recommendation of President Acker that this be done in this instance.

"Sincerely your friend,

"T. M. Dye, Secretary,

"Mississippi State Medical Association."

COUNTY EDITORS

Through the cooperation of Dr. H. Lowry Rush, Meridian, Councilor, Sixth District, Mississippi State Medical Association, Dr. A. M. McCarthy, Electric Mills, has been appointed Editor for Kemper County.

This appointment makes our Board of Editors complete. We now have Editors for each of the eighty-two counties in the state. With increased activity on the part of our editors who have been delinquent in the past, each member of our Journal will now present the activities of medicine in Mississippi in true cross section.

MEDICAL WRITING

(Continued)

From "THE ART AND PRACTICE OF MEDICAL WRITING," Simmons and Fishbein. By permission.

"The Medical Society Address. If an author is to be the only speaker, his anxiety will not be as to how briefly he can present his subject, but, rather, as to how he will fill the time he is expected to occupy. Brevity, conciseness, the elimination of unnecessary details, and the avoidance of branching off into unrelated and irrelevant subjects and of the use of colloquial language will give him no concern. He will consider as appropriate and proper the relating of unimportant incidents in his experience; for instance, a case report, an occasional aside, and personal allusions. In this he will be right. But he will not be right if he submits his article for publication without modifying it. Common courtesy compels his audience to remain and listen until he concludes his address; but if his paper is prolix or rambling, it will have few readers. When the paper is published the personal equation does not enter in, and the courtesy of the listener has vanished; it is now cold type. At least 10 per cent of the manuscripts rejected by The Journal have been returned because they have been prepared for reading before a society and submitted for publication, evidently without revision. Let it be remembered that a manuscript that is fit to read is sometimes fit to print, but a manuscript that it fit to print is always fit to read.

"Length. An occasional reason for the return of a manuscript is its length. Like Einstein's theory as to space and time, however, length in this case is a matter of relativity. A paper of 500 words may be long; one of 5,000 may be short. The primary point is not length but whether the material justifies the length. Usually, manuscripts are unnecessarily long because of easily avoidable faults in construction, such as rambling, verbosity, prolixity or diffuseness. These points will be taken up in other chapters.

A STANDARD

"Manuscripts are therefore rejected by discriminating editors for various reasons relating to the suitability of the material and to its general construction. Of these, by far the most important is the material; if the contribution is of value, other faults are susceptible of correction. As a standard for judging the value of the material embodied in a manuscript, that set for section papers in the Scientific Assembly of the American Medical Association may be borne in mind. This standard provides that papers must either (1) contain and establish positively new facts, modes of practice or principles of real value; (2) embody the results of well advised, original researches, or (3) present so complete a review of the facts concerning any particular subject as to enable the reader to deduce therefrom legitimate, important conclusions."

(To be continued)

COURSE AT MAYO CLINIC FOR M. R. C. OFFICERS

In the September issue of this Journal was announced the medico-military course of inactive duty training for Medical Reserve Officers to be held at the Mayo Clinic during the month of October. With the desire to visit this well known clinic, I accepted this course as an *entree*, and was so agreeably surprised with the excellent opportunities that were offered for clinical post-graduate study and medico-military advancement, that I am inclined to publish this synopsis of my experience, so that more of the profession will know what the repetitions of this course will have to offer in the future.

The clinic, which is unquestionably a mecca of medical learning today, received us with open arms. It placed at our disposal all of its clinical material, its laboratories, a splendid museum and library. The wonderful hospitality and exceptional courtesies shown made us feel at home from the first day and allowed intimate contact with members of the faculty and staff in whose work we were particularly interested. The same was true of Col. Geo. A. Skinner and staff, under whose auspices the course was given. While there I found no one too busy or too important to listen to our inquiries and elaborate upon each subject of interest. This whole hearted cooperation, I think, is one of the chief advantages of this course to the practicing physician who wants to spend a couple of weeks each year seeing what the other fellow is doing.

The schedule kept us busy for two weeks, with the exception of Saturday afternoon and Sunday. It opened with an address by Brigadier General W. J. Mayo, Aux.-Reserve, in which he gave us the very interesting history of the clinic. How the idea originated in his family as an idealistic dream over forty years ago, and how it gradually developed into the fulfillment of that dream in the present elaborate organization which includes approximately one thousand in its personnel, all working together under one roof. The magnitude and precision of this organization is, in itself, a subject of interesting study. Each day was divided into two parts. The forenoons were left free for us to devote to the professional subjects of our own selection; the afternoons and evenings to medico-military subjects and subjects of general interest.

Each evening we were given printed information concerning the activities of the clinic for the following day. For example, they who were interested in surgery had a surgical list stating the name of operation, operator, time and place. From this data we could outline our own program for the following morning, each selecting the type of surgical procedure that was of particular interest. The operators arrived early enough to

discuss the case history and differential diagnosis. They made special effort to demonstrate the pathology in situ and operative technique. After the pathology was removed, a member of the pathological staff was at hand to demonstrate and discuss the specimen. During the closure of the incision and between cases the operator was open to questions concerning additional features of the case. These men invited personal contact and subsequent information to be gained from ward rounds. The same opportunities were afforded in general medicine and the medical specialties through ward rounds, assembly discussions, seminars, etc.

Each afternoon from one-thirty to four-thirty, we gathered in the assembly hall of the clinic building, and were presented with medico-military subjects in a manner in which they were truly enjoyed. These sessions were conducted very much after the fashion of our medical conventions. Each subject was presented in the form of a treatise, and was then opened for general discussion. The discussion of these subjects was very interesting, because there was always a number of officers in the assembly who had had world war experience with each particular problem, and they were able to tell us how it would work out under the stress of combat conditions. In the evening from seven-thirty to nine-thirty we were presented with subjects that were of equal interest to the medical officer and practitioner. Most of these subjects were illustrated by lantern slides and several by movie reels. Each Wednesday night we attended the general clinic staff meetings, where many interesting subjects were presented and discussed. At one of these meetings two well known foreign surgeons, who were visiting the clinic, were presented and gave very interesting discourses about the trend of surgery abroad.

The roll call included one hundred and thirty-four officers, from twenty-four states, and among that number were men of national and international recognition in the field of medical as well as medico-military endeavor. A large number of the prominent men at the Mayo Clinic are members of the Medical Reserve Corps. Our social relationship was like one large family; everyone was glad to know you and consequently we had our fun.

The clinic gave us a farewell banquet and sent us home with the assurance that the plans they have in mind for next year's course will add many improvements. "You haven't seen anything yet," they promised; so I sincerely recommend to Medical Reserve Officers who might be able to make the trip next year, to watch for the announcement and take advantage of it. And to you of the profession who are not members

of the M. R. C., I feel that the advantage of this type of training will justify your application.

A. C. McCarthy.

Electric Mills,
December 7, 1932.

MISSISSIPPI STATE HOSPITAL, JACKSON

There was a clinic in behalf of the Common Welfare Committee by this staff. The patients were presented along with the discussion of each case. The doctors present were C. D. Mitchell, superintendent; W. E. Clark, assistant superintendent; A. L. Monroe, R. R. Halfacre, R. R. Welch, J. E. Brown, and J. S. Hickman. Each doctor presented a case of a different nature. The visitors seemed to enjoy the clinic very much.

Dr. J. E. Brown and family recently visited Meridian and reported a very pleasant time.

Dr. R. R. Halfacre and family visited his home at Sumrall and reported a very nice time. This is where Dr. Halfacre enjoyed a very lucrative practice before his appointment as staff physician at this institution.

Dr. R. R. Welch visited his home at Norfield to vote for a Democratic president, an unusual thing to do. We believe such an opportunity will present itself more often in the future.

Dr. C. D. Mitchell made a visit to his old home in Pontotoc County where he likewise voted once more for a Democratic president.

Dr. A. L. Monroe lectured to the Millsaps College student body on the subject of "Dementia Praecox," and to the sociology class at Bellhaven on "Heredity."

Dr. W. E. Clark, who had an accidental injury to the spine sometime ago, is up and about and we are glad to report he seems to be completely recovered and back on the job again. I will say he is missed when out. He has been on the job for 18 years.

Dr. Hickman and family recently made a visit to their old homes in Philadelphia.

The writer had the pleasure of meeting with the Central Medical Society at the last meeting which was held at the Robert E. Lee Hotel, where he enjoyed a sumptuous banquet and listened to a fine and instructive program.

It might be interesting for you to know that we now have nearly 2600 patients in this institution. We are proud to report that our hospital is going along nicely. Our efficient superintendent, Dr. C. D. Mitchell, stated he had one of the lowest death records last month in a long time, and in fact was pleased very much with the way things are going.

We hope to soon be in our new hospital out in Rankin County which will be one of the best of

its kind in the country. Then we want you all to visit us.

J. S. Hickman.

Jackson,

December 8, 1932.

DR. W. C. BREWER

Dr. W. C. Brewer, Columbus, died November 28, 1932, at the age of 56 years.

Dr. Brewer was born at Black Hawk, the son of W. W. and Priscilla (Cage) Brewer. He was graduated from the University of Mississippi in 1898 and received his medical degree from Tulane University in 1901. He then located in Columbus. Dr. Brewer took post-graduate work at a New York post-graduate school and hospital in 1905 and later was elected health officer of Lowndes County. He acquired the Columbus Hospital in 1910. He was a member of the North East Mississippi Thirteen County Medical Society, and of the Mississippi State Medical Association, a fellow of the American Medical Association and of the American College of Surgeons. He was a Mason, Kiwanian and Elk. He was affiliated with the Methodist church.

MISSISSIPPI STATE BOARD OF HEALTH

During the third quarter of 1931 there were 551 cases of typhoid fever reported to the State Board of Health; during the same three months of 1932, only 455 cases were reported.

The final report of the Committee on the Costs of Medical Care, released on November 29, shows that there are 25,000 doctors in excess of the number actually needed in the United States. In this state there are a good many areas suffering for medical service, but the fact cannot be disputed that there are too many physicians located in the more populous areas. There is not a shortage of physicians in Mississippi, but a poor distribution. Many recent graduates in medicine are now settling in rural communities, whereas, three or four years ago they would not have thought of leaving the vicinity of a hospital.

The State Board of Health will hold its regular December meeting on December 12.

It is hoped that the next Legislature will see fit to pass a Uniform Automobile Drivers' License Law. This law is in effect in many states and there has been great improvement in safety of drivers and pedestrians in these states.

The death rate for the State of Mississippi from all causes in 1920 was 12.3. Last year, the rate was 10.8. Deaths from the following, in the last ten years, have decreased as follows: Typhoid, 19.1 to 10.4; malaria, 40.3 to 10.4; tuberculosis, 126.8 to 78.2; pellagra, 30.9 to 26.6.

Photostatic copies of records of attendance and registration of births for each physician in Mis-

issippi are being mailed. Each physician's record shows the number of births attended, in which month the births occurred, and in which months the birth certificates were filed.

As an activity of the five year program for cancer control sponsored by the State Medical Association of Mississippi, a radio talk on cancer was given over WJDX, Jackson, as one of the State Board of Health talks. It was shown that cancer deaths are slowly increasing in Mississippi. In nine counties the number of deaths through September of this year was equal to the number for all of last year; in twenty-three other counties, the total number of deaths for the first nine months of this year was in excess of the number for the year 1931.

Felix J. Underwood, Executive Officer.
Jackson,

December 9, 1932.

CENTRAL MEDICAL SOCIETY

The November meeting of the Central Medical Society met at the Robert E. Lee Hotel in the Japanese Room with 48 members and guests present. After partaking of an elegant dinner served by the hotel the regular program was taken up. A letter from the president of the State Medical Association, Dr. Acker, was mentioned by the secretary. This letter asks that \$1.00 be collected from members to pay for the dues of the ladies of the Auxiliary. A motion by Dr. Barksdale with the proper second to not pay such dues by members of the Central Medical Society was carried. A letter from a podiatrist, asking consideration of a bill proposed for regulation of podiatry was partially read and the matter referred to Drs. Noblin, Garrison and Jones as a committee. A letter from the secretary of the staff of the Jackson Infirmary was read, asking that the secretary procure data in the recent Applewhite trial. The president, Dr. Crisler, appointed Dr. Adkins chairman, Drs. Thompson and Wall as a committee to report on the Henderson testimony. Time for the next meeting was fixed by the president at 6 o'clock, the third Tuesday in December.

Dr. R. W. Hall's paper on "Radio Therapeutics" was discussed by Drs. Adkins, Barksdale, Wall and Hall. Dr. Batson's paper on "Cataract" was discussed by Drs. Sims, Hughes, Harris, Kemmerer and Batson. Drs. Rehfeldt and Womack spoke briefly on the Southern Medical Association meeting. The name of Dr. Edmonson of Edwards was presented for membership and referred to the committee. Adjournment at 9:30 P. M.

Robin Harris, Secretary.
Jackson,
December 10, 1932.

CLARKSDALE AND SIX COUNTIES
MEDICAL SOCIETY

The meeting of the sixty-first semi-annual session of the Clarksdale and Six Counties Medical Society was called to order at 7 P. M., on November 2, in the Alcazar Hotel dining room with Dr. A. C. Covington, president, presiding. Dr. E. Leroy Wilkins was appointed toastmaster and kept the meeting lively with anecdotes. Many guest physicians were asked to participate in the joke-telling competition and graciously acquitted themselves in a style as became true physicians, gentlemen and scholars.

After the banquet, the toastmaster relinquished the chair to the president, who spoke briefly on "The Need for Community Hospitals." The minutes were then read by the secretary, Dr. V. B. Harrison, approved, and adopted. This was followed by the annual financial report, which was also adopted as read. A plea for more members and more prompt payment of dues was made by the secretary with questionable results.

Officers for the ensuing year were then elected. The secretary presented the petition of Mrs. W. C. Pool, president of the State Auxiliary, to the effect that the doctors pay one dollar in addition to the medical society dues, the same to be given to the local Auxiliary. A motion to this effect was made but was unanimously defeated.

Drs. J. D. Bile, Jr., and W. L. Slaughter, on approval of the Board of Censors and favorable vote of acceptance of the Society, were admitted to membership.

The President appointed each vice-president editor for the county which he represents.

The scientific session was opened by Dr. E. C. Mitchell from Memphis, who gave a lantern-slide illustrated lecture on "The Care of the Infant and Pre-school Child." The paper was discussed by Drs. John Shea, Simpson, Stanford, and closed by Dr. Mitchell. The next paper on the program was "The Present Trend in Public Health" by Dr. Felix J. Underwood of Jackson. The paper was discussed by Drs. Phil Shrier and V. B. Harrison, and closed by Dr. Underwood. The next one on the program was "A Motion Picture Study of the Heart in Health and Disease" by Dr. Lyle Motley of Memphis. As this was more of a teaching subject and highly technical, there was no discussion. The next paper on the program was "An Unusual Case of Ectopic Pregnancy" by Dr. J. P. Walker. The case was discussed by Dr. McGehee, who advised the essayist to publish the case due to its unusual characteristics and favorable prognosis.

Because of the lateness of the hour Dr. A. J. Brown's paper entitled "Non-operative Sinusitis," at his own request, was read by title only.

There being no further business the Society adjourned.

V. B. Harrison, Secretary.

Clarksdale,
December 7, 1932.

EAST MISSISSIPPI MEDICAL SOCIETY
IMPORTANT MEETING

East Mississippi Medical Society will meet on the mezzanine floor of the Lamar Hotel, Meridian Thursday, December 15, beginning promptly at 3:00 P. M.

PROGRAM

1. Treatment of Burns—Dr. R. G. Hand, Quitman. Discussion by Drs. Dudley Stenis, M. L. McKinnon.

2. Should the Insane Hospital Be Relieved of the Congestion—Dr. A. L. Monroe, Mississippi State Hospital, Jackson. Discussion by Dr. W. J. Cavanaugh.

3. Multiple and Solitary Cysts of the Kidneys—Report of Two Cases—Dr. W. J. Anderson, Meridian. Discussion by Drs. J. T. Bailey and W. R. Holladay.

4. Symptoms of Colon Dysfunction—Diagnosis and Treatment—Dr. H. G. Rudner, Dr. Henry G. Rudner Clinic, Memphis, Tenn. Discussion by Drs. A. L. Majure and H. F. Tatum.

Immediately following the program, officers will be elected for the ensuing year.

J. S. Hickman, President.

T. L. Bennett, Secretary.

Meridian,
December 9, 1932.

HARRISON-STONE-HANCOCK COUNTIES
MEDICAL SOCIETY

The Harrison-Stone-Hancock Counties Medical Society met December 7, in Gulfport, at the King's Daughters' Hospital, at 7:30 P. M.; an unusual attendance and meeting. Officers for 1932 were elected.

Dr. E. C. Parker and Charles LeBarron presented radiographs of a couple of interesting cases and discussed them, both being very interesting as well as unusual.

We were very glad to have with us Dr. F. J. Underwood, chief executive of the Mississippi State Board of Health, who presented a paper, "The Present Trend of Public Health." The paper was enjoyed by all. We felt that each one present received from this paper something of value, also the discussion following was extensive and educational and interesting.

We received one new member, Dr. H. K. Rouse, Jr. The doctor is a recent graduate and is now located near Gulfport at Lyman. We are glad to have him with us.

We were delighted to have with us as a visitor, Dr. E. H. Long, of Ohio. Dr. Long is recuper-

ating from a rather severe attack of pneumonia on the coast. He expressed himself as well pleased with our coast and his improvement since being with us.

D. H. Ward.

ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY

The annual meeting of the Issaquena-Sharkey-Warren Counties Medical Society was held at the Y. M. C. A., Vicksburg, December 13, at 6:00 P. M. Twenty-nine members and twenty-one guests were in attendance. Dr. H. S. Goodman, Cary, President, presided.

After a banquet, the scientific program was presented as follows:

Some Reflections Upon Peripheral Vascular Disease—Dr. I. I. Lemann, New Orleans.

Demonstration of the Indispensable Use of the X-Ray in the Diagnosis of Some Obscure Clinical and Surgical Diseases (lantern slides)—Dr. Amedee Granger, New Orleans.

Kidney Complications of Gall Bladder Disease—Dr. Willard Bartlett, Jr., St. Louis.

Officers for the year 1933 were elected as follows:

President, Dr. Preston S. Herring, Vicksburg.

Vice-Presidents, Dr. T. W. Huey, Grace, (Issaquena County); Dr. M. J. Few, Rolling Fork (Sharkey County); Dr. W. E. Johnston, Vicksburg (Warren County).

Secretary-Treasurer, Dr. L. S. Lippincott, Vicksburg (re-elected).

Members of Board of Censors for three years, Dr. H. S. Goodman, Cary.

Member of Medico-Legal Committee, Dr. E. F. Howard, Vicksburg (re-elected).

The next meeting of the society will be held on Tuesday, January 10, at 7 P. M.

NORTHEAST MISSISSIPPI THIRTEEN COUNTIES MEDICAL SOCIETY FOURTH QUARTERLY MEETING, 1932 ABERDEEN CITY HALL PROGRAM

December 20, 1 o'clock P. M.

Luncheon, Dining Hall, Baptist Church.

Business Session:

Meeting called to order, W. C. Spencer.

Invocation, Rev. W. R. Lott.

Secretary's report.

Election of officers: President this year from Calhoun County.

Old and new business.

Scientific Session:

The Benefit of X-Ray Studies in Diagnosis—W. R. Bethea, Memphis.

Present Trends in Public Health—F. J. Underwood, Jackson.

Cardiospasm—W. H. McRea, Corinth.

Herpes Zoster, or Zona, with report of an in-

teresting case—J. G. Lilley, Tupelo.

Adjournment.

James M. Acker, Jr., Secretary.

Aberdeen,

December 10, 1932.

QUARTERLY MEETING OF THE NORTH MISSISSIPPI MEDICAL SOCIETY

At Water Valley, December 14, 1:30 P. M.

Masonic Temple

PROGRAM

Invocation.

Business Session, Election of Officers for 1933.

(1) "Immediate and Ultimate Prognosis of Certain Types of Cardio-Vascular Disease"—Dr. Whitman Rowland, Memphis.

Discussion opened by Drs. S. L. Cox and J. S. Donaldson.

(2) "Umbilical Hemorrhage"—Dr. R. G. Grant, Holly Springs.

Discussion opened by Drs. C. M. Murry and R. J. Criss.

(3) "Duodenal Ulcer" (with motion pictures)—Dr. C. M. Speck, New Albany.

Discussion opened by Drs. E. S. Bramlett and H. N. Mayes.

(4) Case Reports—(Society members are urged to present briefly any cases that might be of interest to the society.)

H. P. Boswell, President.

A. H. Little, Secretary.

Oxford,

December 12, 1932.

PIKE COUNTY MEDICAL SOCIETY

The Pike County Medical Society had its regular monthly meeting at 7:00 P. M., December 1, in the sub-story reception room of the Methodist church, in McComb.

After dinner was served, the meeting was called to order by the vice-president, Dr. M. D. Ratcliff. The first business presented was the annual election of officers. The nominating committee was appointed and made its report as follows: For president, Dr. S. P. Klotz, McComb; for vice-president, Dr. J. M. Smith, Magnolia; for secretary-treasurer, Dr. T. Paul Haney, Jr., McComb. These names were submitted to the society for a vote, and each of the men presented for office was unanimously elected by the society. Dr. Klotz relieved Dr. W. O. Biggs as president; Dr. Smith relieved Dr. M. D. Ratcliff as vice-president; Dr. Haney was re-elected secretary-treasurer.

The Secretary then stated that the 1932 Clinical Days' program ended with this meeting. Dr. D. T. Brock made a motion that a committee be appointed to write a resolution of thanks to the Commonwealth Fund for the cooperation that it has given this society in its programs during the year 1932. It was also requested that this committee in this resolution respectfully ask that

the Commonwealth Fund continue its cooperation during the year of 1933.

The secretary then presented a letter from the Bureau of Medical Economics of the American Medical Association requesting certain information under the subject, "Schedule on Medical Economics." The secretary was authorized to fill out the form presented, answering the questions asked.

The county health officer, Dr. Haney, then presented the following outline of a tuberculosis program contemplated in Pike County, which briefly is:

1. The county health officer will tuberculin test all familial contacts of tuberculosis and any other persons presenting themselves for such test.

2. Positive tuberculin reactor will then be referred to his or her family physician.

3. If the physician so desires, he may then refer these cases found tuberculin positive to a clinic conducted at certain intervals by Dr. Boswell of the State Sanatorium. Dr. Boswell will give each of these cases referred to him a complete chest examination and submit his findings through the county health officer to the family physician.

4. The patient, if found with active tuberculosis, is then given medical attention by the family physician as is now being done in Pike County.

5. The nursing staff of the Pike County Health Department is now available to all physicians in the county for any public health nursing service requested by the physician. Physicians have thus far utilized this service most admirably.

Dr. B. J. Hewitt made the motion that this society approve such a program as outlined. This was seconded by Dr. Purser, and the society unanimously approved such a program.

There being no further business to come before the society, the business program was adjourned, and the scientific portion of the program started. Dr. James R. McCord, professor of obstetrics and gynecology at Emory University, School of Medicine, Atlanta, Georgia, who had at 2:00 P. M. presented to a group of physicians an address on "Toxemias of Pregnancy and Prenatal Care," was introduced to the society by Dr. Haney. Dr. McCord then gave a very splendid address on "The Mechanism and Management of Normal Labor and Management of the Puerperium." After an expression of appreciation was made to Dr. McCord for the splendid program given the society by him on this date, the society was adjourned until the next meeting.

The following guests and members were present: Drs. O. G. Eubanks and Wilson, Crystal Springs; J. W. Barkley, Hazelhurst; Abney, D. T. Brock, L. W. Brock, R. H. Brumfield, A. J. Fortinberry, E. M. Givens, T. Paul Haney, Jr., W. C. Hart, B. J. Hewitt, T. E. Hewitt, S. P. Klotz, Thomas Purser, M. D. Ratcliff, Elise Rutledge, L. J. Rutledge, all of McComb; and Mrs.

Ormsby, superintendent of nurses, McComb City Hospital.

T. Paul Haney, Jr., Secretary.

SOUTH MISSISSIPPI MEDICAL SOCIETY.

The regular meeting of the South Mississippi Medical Society was held in Hattiesburg on December 8. At noon the doctors of Hattiesburg served a luncheon to the visiting doctors at the dining room of the Methodist Hospital. Immediately after luncheon a dry clinic was held in which Dr. Jamison gave a most interesting discussion on the treatment of pneumonia. This was followed by Dr. Campbell on the general subject of fractures with some roentgen ray demonstrations. Immediately after the clinic at the hospital we went to the Forrest Hotel for the following scientific program:

"The Early Diagnosis of Tuberculosis."—Dr. C. E. Walker, Assistant Superintendent of the State Sanatorium.

"A Paper."—Dr. Homer Dupuy, Professor of Otolaryngology, Louisiana State University.

"Fractures In and About the Hip."—Dr. Willis C. Campbell, Campbell Clinic, Memphis, Tenn.

"The Medical Aspects of Cerebral Hemorrhage."—Dr. Chaillé Jamison, Professor of Clinical Medicine, Tulane University.

"Present Trends in Public Health."—Dr. Felix J. Underwood, Mississippi State Board of Health.

This was a most interesting and instructive meeting. We were very fortunate indeed to have seventy-five doctors from our district present.

At the conclusion of the scientific program we had an election of officers for the year 1933 as follows:

President, Dr. R. H. Cranford, Laurel.

First Vice-President, Dr. J. G. Gardner, Columbia.

Second Vice-President, Dr. C. E. Godman, Poplarville.

Secretary and Treasurer, Dr. J. P. Culpepper, Jr., Hattiesburg (re-elected).

J. C. Culpepper, Jr., Secretary.
Hattiesburg, December 14, 1932.

TRI-COUNTY MEDICAL SOCIETY

(Copiah, Lincoln, Walthall, and Lawrence)

The Tri-County Medical Society met in annual session at the Inez Hotel, Brookhaven, at 12:30 P. M., December 13. After the annual banquet which was presided over by Dr. O. N. Arrington, Chairman of the Arrangements Committee, Dr. F. J. Underwood, Executive Secretary, Mississippi State Board of Health, read a most interesting paper on "Present Trends in Public Health."

Dr. A. G. Harvey, Tylertown, President of the Society, next read his presidential address on "The Doctors' Business," which was not only interesting and entertaining but very informative—a

modest piece of advice to doctors who do not keep "business" as well as "medicine" before them for constant consideration.

The business session was next held with annual election of officers which resulted as follows:

President, Dr. J. W. Wilson, Monticello (Lawrence County).

Vice-Presidents, Dr. J. H. Beavers (Copiah County), Dr. R. S. Savage (Lincoln County), Dr. B. L. Crawford (Walthall County), Dr. B. S. Waller (Lawrence County).

Secretary-Treasurer, Dr. H. R. Fairfax, Brookhaven (re-elected).

Member of Medico-Legal Committee, Dr. F. E. Collins, Brookhaven.

Delegates to the Mississippi State Medical Association, Dr. W. L. Little, Wesson; Dr. O. N. Arrington, Brookhaven; Dr. A. B. Harvey, Tyler-town; Dr. B. S. Waller, Silver Creek.

Councilor W. H. Frizell of the Eighth District announced that the rules governing membership in local societies would be strictly adhered to as some doctors have placed their membership outside this territorial jurisdiction.

The program committee has already mapped out the work for the entire year of 1933, with stated meeting places for each quarterly meeting. The second Tuesday in March the society will meet in the Copiah-Lincoln Junior College at Wesson, with a health program for the public. Students will be urged to attend. This promises to be a most excellent program since outstanding men in public health affairs will supply the addresses.

The Ladies Auxiliary to the Tri-County Medical Society met with the medical society and the members were guests at the annual banquet in Brookhaven. They heard Dr. Underwood's address and then returned to hold their regular meeting.

This organization has recently taken on new life and has shown much interest in their activities. We predict a good year of usefulness for them. They will meet with the Tri-County Society at the Junior College, Wesson, next March.

W. H. Frizell,

Councilor, Eighth District.

Brookhaven, December 13, 1932.

SECOND COUNCILOR DISTRICT

There is no news of particular interest in the Second Councilor District. The doctors are not making much headway in collecting. Hambone said, "I am trying to pay my doctor bill, but the doctor said he was tired of eating rabbits." Sorghum molasses are good too but you get tired of "them," likewise of black-eyed peas.

Influenza has been epidemic and several of our doctors have been confined to their homes with this ubiquitous malady.

I wish sincerely that every county editor in this district would send some news items to our editor of the New Orleans Medical and Surgical Journal.

This is our Journal and it is indeed a journal of merit—worthy of our best efforts. Let each county editor take due notice and send Dr. Lippincott some matter for his pages.

A Merry Christmas and a Happy New Year to all.

L. L. Minor, Councilor.

Memphis, Tenn., Route 4, December 8, 1932.

PROGRAM

of the

TWENTIETH ANNUAL CONFERENCE OF HEALTH OFFICERS, SANITARY ENGINEERS AND INSPECTORS

Convention Hall, Robert E. Lee Hotel
Jackson, Mississippi

December 12, 13 and 14, 1932

Monday, December 12, 9 A. M.

9:00. Meeting called to order.

Dr. Felix J. Underwood

Invocation.

Dr. J. B. Hutton

Roll call.

9:30. Urban Health Problems—Their Solution.

Dr. L. M. Graves, Superintendent of Memphis, Tenn., Department of Health.

Discussion and questions.

10:30. Lecture and Round Table Discussion.

Dr. Allen W. Freeman, Professor of Public Health Administration, Johns Hopkins University of Baltimore

Lunch

2:00. Prenatal Program as a Routine Procedure of a County Health Department.

Dr. N. C. Knight, Indianola

Discussion—Dr. C. J. Vaughn, Lexington;

Dr. W. E. Neblin, Jackson

2:45. Community Health Education.

Dr. J. A. Milne, Jackson

Discussion—Dr. F. M. Smith, Vicksburg;

Dr. D. V. Galloway, Meridian.

3:30. The Responsibility of Health Authorities and Physicians with Reference to Pasteurization of Milk in Communities in Which Pasteurization Is Not Compulsory.

Paper written by Leslie C. Frank, in Charge of Office of Milk Investigation, U. S. Public Health Service—Read by H. A.

Kroeze, Jackson

Discussion—Dr. H. C. Ricks, Jackson

Evening Session, 7:30 P. M.

Address—Honorable Martin Sennett Connor, Governor

Address—Dr. W. A. Evans, Professor of Public Health, Northwestern University Medical School, Chicago

Tuesday, December 13, 9 A. M.

9:00. Utilizing Organized Groups in a County Nursing Program.

Miss Augustine Stoll, R. N., Jackson

Discussion—Dr. T. Paul Haney, Jr., McComb; Dr. A. R. Perry, Greenville.

10:00. Lecture and Round Table Discussion.
Dr. Allen W. Freeman, Johns Hopkins University

Lunch

2:00. Past, Present, and Future of Health Work in Birmingham and Jefferson County, Alabama.

Dr. J. D. Dowling, Director, Jefferson County Health Department, Birmingham
Discussion and questions.

2:45. Suggested Program for a County Served by a Part-Time Health Officer.

Dr. T. F. Clay, Tutwiler

Discussion—Dr. A. K. Naugle, West Point; Dr. Ira B. Seale, Holly Springs.

3:20. County Mouth Hygiene Program.

Miss Gladys Eyrich, Jackson

Discussion—Dr. V. B. Harrison, Clarksdale

3:45. Important Details of County Health Department Administration.

Dr. H. C. Ricks, Jackson

Wednesday, December 14, 9 A. M.

9:00. Nutritional Diseases.

Dr. G. W. Wheeler, Surgeon, U. S. Public Health Service, Washington

Discussion—Dr. R. D. Dedwylder, Cleveland; Dr. H. C. Ricks, Jackson

10:00—Lecture and Round Table Discussion.

Dr. Allen W. Freeman, Johns Hopkins University

1:00. Adjournment.

SPECIAL SESSIONS FOR SANITARY ENGINEERS AND INSPECTORS

Robert E. Lee Roof Garden

H. A. Kroeze, Presiding

Tuesday, December 13, 10 A. M.—1 P. M.

1. Opening remarks relative to general sanitation activities.

H. A. Kroeze

Round Table Discussion

2. Milk Control Activities.

Opened by Dr. N. M. Parker

Discussion continued by Dr. E. S. Norton, James Fulson, and Dr. J. S. Kamper

3. Coordination of the Day's Work.

Opened by Stanley Ratliff

Discussion continued by Lorenzo McCaleb, H. C. Taylor, and G. C. Hamilton

4. Municipal Inspections.

Opened by Floyd Ratliff

Discussion continued by Roy Stovall, O. W. Thompson, and Mack Crawford

5. Safeguarding Farm and School Water Supplies.

Opened by H. C. Taylor

Discussion continued by John Grant, L. W. Murphy, Jr., and Hugh McInnis

Wednesday, December 14, 9 A. M.—1 P. M.

Round Table Discussions

1. What the County Inspector Can Incorporate in His Program Toward Malaria Control.

Opened by Nelson H. Rector

Discussion continued by J. E. Johnston, Robert Fletcher, and T. F. Durham

2. Importance of and Uses of Adequate Records of an Inspector's Activities.

Opened by Lorenzo McCaleb

Discussion continued by A. O. Johnson, Delos J. Magee, and Paul A. Davis

3. Charts, Graphs, and Maps.

Opened by John Grant

Discussion continued by James Lary and R. H. Riffin

4. The Need of Enthusiasm to Overcome Present Problems Confronting the Sanitary Inspector.
H. E. Miller, Special Supervising Sanitary Engineer, U. S. Public Health Service

5. Symposium of Methods of Excreta Disposal.

Discussion opened by H. E. Miller

Discussion continued by G. C. Hamilton, Cyrus Emery, and L. W. Ware

Adjournment.

ADAMS COUNTY

Miss Ethel B. March, Natchez, was recently elected president of the Mississippi Nurses' Association.

Forty or more guests attended a Hallowe'en party of the Student Nurses' Association of the Natchez Hospital.

L. Wallin, County Editor.

Natchez, December 7, 1932.

ALCORN COUNTY

Drs. Hill, Hormell and others of Alcorn County doctors who attended Dr. McCord's lectures at Booneville were pleased and reported they would be glad to attend a second time.

Drs. Norwood and Gilbert tendered a supper at Waukomis Lake last month to the Corinth doctors, which was thoroughly enjoyed by all. This promotion of good fellowship under the stimulation of a bounteous feast, spring water and the harvest moon is worthy of emulation in our sister counties.

Dr. Stanley A. Hill, son of Dr. J. R. Hill, is now associated with Dr. Guy A. Caldwell, Shreveport, La., in orthopedic surgery.

We now have two banks open, the Corinth Bank and Trust Company and the Security Bank. Dr. R. C. Liddon is President of the latter bank.

Dr. M. H. McRae has been on the sick list for the past ten days and is getting a needed rest over in Tennessee one mile from a telephone.

W. A. Johns, County Editor.

Corinth, December 5, 1932.

AMITE COUNTY.....P. J. Jackson, Editor
 ATTALA COUNTY.....C. A. Pender, Editor
 BENTON COUNTY.....F. Ferrell, Editor
 BOLIVAR COUNTY.....C. W. Patterson, Editor
 CALHOUN COUNTY.....F. L. McGauhy, Editor
 CARROLL COUNTY.....J. P. T. Stephens, Editor
 CHICKASAW COUNTY.....W. C. Walker, Editor

CHOCTAW COUNTY

It was not my privilege to attend the meeting of the Winona District Medical Society at Grenada, November 9. I noticed, however, that Dr. S. S. Caruthers was elected president and Dr. Edwin Holmes reelected secretary and treasurer. Those men are very active members and the work will be well done.

Dr. J. D. Weeks, aged 73 years, the oldest physician in Choctaw county, died at his home at Ackerman, Thanksgiving day. He lived in this community his entire life, and will be greatly missed by all.

Dr. W. D. Arnold carried his daughter, Mrs. Curry, to a nearby hospital recently for treatment. The many friends of the family wish for her an early recovery.

The writer visited his son, Wesley, who is attending the Alabama University, on November 27.

J. James, County Editor.

Ackerman, December 5, 1932.

CLAIBORNE COUNTY.....W. N. Jenkins, Editor
 CLARKE COUNTY.....B. F. Hand, Quitman, Editor
 CLAY COUNTY.....L. W. Dotson, Editor
 COAHOMA COUNTY.....A. C. Everett, Editor
 COPIAH COUNTY.....W. L. Little, Editor
 COVINGTON COUNTY.....D. T. Allread, Editor
 DESOTO COUNTY.....A. V. Richmond, Editor
 FOREST COUNTY.....C. C. BUCHANON, Editor
 FRANKLIN COUNTY.....C. E. Mullins, Editor
 GEORGE COUNTY.....R. F. Ratliffe, Editor
 GREEN COUNTY.....Aristophane Graham, Editor

GRENADA COUNTY

Medical affairs in our county are about as usual. They change very little in our circle. All the doctors are well and at work. A mild outbreak of influenza has stirred them up somewhat.

Our good old friend and comrade, Dr. Young, has been confined to his bed for several weeks and is a constant sufferer. He bears up with the spirit of a true Christian soldier.

The Winona District Medical Society met in Grenada on November 9, with good attendance of members and several visitors. After a fine program, officers for next year were elected. Dr. S. S. Caruthers, Duckhill, is president and Dr. W. H. Holmes, Winona, is secretary.

We are still hoping for better times. Wishing you all a joyous Christmas season.

T. J. Brown, County Editor.

Grenada, December 10, 1932.

HANCOCK COUNTY

Dr. S. G. G. Gill recently returned to his home in New Orleans. He spends a great part of his time in Bay St. Louis. He is 87 years of age and having done a great deal of work in his life has now retired from practice, although he is for his age very active. He came to New Orleans in 1866 from Chicago.

Rev. M. L. Ward and wife, Belmont, are spending the winter in Bay St. Louis with their son and daughter-in-law, Dr. and Mrs. D. H. Ward.

Dr. B. F. Livingston, Waveland, retired, has been rather seriously ill recently. At this time he is improving.

E. G. Mandeville, Ph. D., and wife, recently of New Orleans, have purchased and improved a permanent home in Waveland on Waveland Avenue. The doctor has retired from business in New Orleans after twenty years of service in his drug business. We are glad to have them and hope they will be happy, contented and with us for many years to come.

Dr. S. H. Anderson, Kiln, has been on the flu program for a few days but glad to say is now out again.

Sales tax adjuster was in town once a few days ago. Poor fellow, don't think he will return. Even a sales tax won't reach cash recollections of some doctors, at least, this time.

D. H. Ward, County Editor.

Bay St. Louis, December 8, 1932.

HARRISON COUNTY.....G. F. Carroll, Editor

HINDS COUNTY

Of unusual interest throughout this section was the recent marriage of Miss Louise Ogden, Port Gibson, to Dr. Temple Ainsworth, Jackson. The marriage was performed December 3, at Port Gibson. Dr. and Mrs. Ainsworth will be at home in Jackson following their honeymoon.

The latest news of general interest is the announcement of the engagement and approaching marriage of Miss Anna Hagaman, Raymond, to Dr. Brister Ware, Jackson. The marriage will be performed on December 11. We all wish for these two couples a most happy and prosperous married life.

Dr. L. W. Long was away from Jackson from November 11 until November 20, doing post-graduate work at Vanderbilt and attending the Southern Medical meeting at Birmingham.

Dr. H. F. Magee spent a week in November visiting in Kansas City and Fort Leavenworth.

Dr. H. C. Sheffield has been sick recently with influenza and later has had troublesome tonsils removed. We are glad to see him out again.

Dr. N. C. Womack, state chairman of the American Pediatrics Association, attended the meeting of that body during the recent meeting of the Southern Medical at Birmingham. Dr. Felix Un-

derwood was also at this meeting and was made chairman of one of the committees to make plans for the future work.

Dr. J. W. Barksdale and family motored to Little Rock, Ark., where they spent a most pleasant Thanksgiving with Dr. Barksdale's daughter, Mrs. George Vinsonhaler.

Dr. Wm. F. Hand and family spent a very pleasant Thanksgiving visiting the homes of both Dr. and Mrs. Hand's families, in South Mississippi.

The staff of the Jackson Infirmary met Wednesday, November 30, with a good dinner being served and a very interesting program being rendered.

The staff of the Baptist Hospital is to hold the December meeting Tuesday, December 6. A splendid program as well as the usual good meal is anticipated.

Hinds County doctors wish for all a Merry Xmas and a happy, prosperous New Year.

Wm. F. Hand, County Editor.

Jackson, December 6, 1932.

HOLMES COUNTY.....R. C. Elmore, Editor
HUMPHREYS COUNTY.....G. M. Barnes, Editor

ISSAQUENA COUNTY

Mrs. Nona Hull Heath, widow of the late Dr. T. A. Heath, the oldest practitioner in the lower Delta, died in Vicksburg of a short illness, and was buried in that city in November. The funeral was largely attended, evidencing the popularity of the family. Mrs. Heath was one of the Christians of our county. We revere her memory.

Dr. J. B. Benton, Valley Park, has been a frequent visitor to Mayersville recently, called here by important business connected with the tax matters of the county.

Two of our three doctors, being members of the Board of Supervisors are having their hands full, working in the important matter of the distribution of the funds allotted Issaquena through the Reconstruction Finance Corporation. We are also expected to render free medical attention to the recipients of this free aid. However, this will be nothing new, as we have been doing it all along anyway.

Dr. W. H. Scudder, accompanied by our county welfare worker, Mrs. G. N. Bourg, visited Jackson on November 26, to confer with the R. F. C. Board, and on the 8th inst. they were called to Greenwood to a business conference of the administering officials of the Delta counties. Our representatives were gratified to know that they are working in perfect accord with the views of Chairman Aubrey Williams, Director of the State Welfare Department.

W. H. Scudder, County Editor.

Mayersville, December 10, 1932.

ITTAWAMBA COUNTY.....W. L. Orr, Editor

JACKSON COUNTY

The Jackson County Medical Society met in regular session at the French Hotel in Ocean Springs where the members were the guests of the Ocean Springs members at lunch. Used here, the term lunch refers to a complete meal served in several courses and there was no evidence of a depression.

The following officers were elected for the ensuing year: F. C. Schmidt, Ocean Springs; Vice-President, J. F. Busey, Pascagoula; Secretary-Treasurer, J. N. Rape, Moss Point (re-elected); Delegate to Mississippi State Medical Association, F. O. Schmidt, Ocean Springs; Alternate, S. B. McIlwain, Pascagoula.

The program consisted of a highly instructive lecture illustrated by lantern slides. The subject was "Head Injuries." This lecture was delivered by Dr. Mims Gage of Tulane University.

Dr. D. J. Williams, Gulfport, councilor of this district, made an official visit and being in a reminiscent mood spoke of old times in medical circles in Jackson County when he was a practicing physician at Moss Point. He paid especial tribute to several of his contemporaries of that time, recalling in detail the splendid attributes of Dr. Singleton A. McInnis of Moss Point.

S. B. McIlwain, County Editor.

Pascagoula, December 9, 1932.

JASPER COUNTY.....J. B. Thigpen, Editor
JEFFERSON COUNTY.....R. B. Harper, Editor
JEFF. DAVIS COUNTY.....G. C. Terrell, Editor

JONES COUNTY

Dr. R. T. McLaurin, Laurel, attended the convention of the American College of Surgeons in St. Louis, the latter part of October.

The following Jones County physicians attended the meeting of the Southern Medical Association held in Birmingham: Dr. W. N. Blount; Dr. R. H. Cranford; Dr. H. G. McCormick; and Dr. J. E. Green. Dr. Blount and Dr. Green were on the program.

Miss Charlotte Lewis, superintendent of nurses of the South Mississippi Charity Hospital, was married on November 17 to Dr. Grady Cook, who is a member of the Crawford Clinic Staff of Hattiesburg.

Mrs. Brooks, who is the mother of Mrs. R. H. Foster, Laurel, is very much improved after a rather serious illness.

Dr. J. D. Smith's daughter was operated upon in the Laurel General Hospital for appendicitis. She has returned home and the latest reports are that she is doing fine.

Dr. R. T. McLaurin has recently purchased a radio knife to be used in his surgical cases where it is indicated.

Joseph E. Green, County Editor.

Laurel, November 21, 1932.

KEMPER COUNTY

Dr. V. M. Creekmore, DeKalb, county health officer, reports that all school children of Kemper county are having a dental examination under the supervision of the board of health.

Dr. J. B. Mooney, Scooba, announces the opening of a new office in the old Bank of Kemper Building.

All acquaintances of Dr. and Mrs. J. L. Hasie were sorry to learn of the recent death of their young daughter, Vanda Nadeene. Dr. Hasie and family accompanied the body to Carlsle, Ark., for burial.

Dr. R. B. Cadwell, Baldwyn, was a recent visitor to the Geo. C. Hixon Memorial Hospital.

Dr. C. E. Baldree, Jr., made a recent visit to his home in Kentucky and reports that in spite of the depression the blue grass still grows blue.

A. M. McCarthy, County Editor.
Electric Mills, December 7, 1932.

LAFAYETTE COUNTY.....E. S. Bramlett, Editor
LAMAR COUNTY.....L. L. Polk, Editor

LAUDERDALE COUNTY

Dr. M. L. Flynt, Newton, has become associated with Dr. F. G. Riley's Hospital at Meridian. He will be subject to calls from the institution. For the past five years Dr. Flynt has been surgeon and owner of the Newton Infirmary.

Mrs. Charles T. Burt and little daughter Frances Milbrey are convalescing from flu, at their home, 711 24th Avenue, Meridian.

Mrs. J. H. Rush is ill in Rush's Infirmary.

Dr. K. T. Klein held the staff meeting of the Meridian Sanitarium Friday evening, December 9.

Dr. and Mrs. W. W. Reynolds sustained a heavy loss and bereavement in the tragic death of their daughter, Elizabeth, who was killed in an automobile accident in Georgia. She, as Mrs. Ledsinger, has resided for ten years away from Meridian. The body was interred here.

Charles T. Burt, County Editor.
Meridian, December 12, 1932.

LAWRENCE COUNTY.....B. S. Waller, Editor
LEAKE COUNTY.....I. A. Chadwick, Editor
LEE COUNTY.....W. A. Toomer, Editor

LEFLORE COUNTY

Dr. J. D. Rudisill, a surgeon of Lenoir, N. C., visited his sister, Mrs. J. C. Lore of Greenwood in November.

Dr. C. D. Alexander, Vaiden, attended the funeral of his friend, Mr. G. A. Wade in Greenwood in November.

Dr. C. D. Alexander, Vaiden, attended the funeral of his friend, Mr. G. A. Wade in Greenwood in November. He also visited his daughter, Miss Ruth Alexander, who is connected with our county health unit.

We deeply sympathize with Mrs. Henry Kennedy in the loss of her father, Dr. J. D. Weeks of Ackerman. He died suddenly, early Thanksgiving morning, at his home, with coronary sclerosis.

Dr. and Mrs. F. M. Sandifer were the guests of Judge Kimbrough at his home on the Gulf Coast for ten days in November.

Drs. E. J. Johnson and R. C. Taylor of Memphis, were recent visitors to Greenwood.

Drs. J. C. Adams, S. L. Brister, Jr., and J. P. Kennedy have been confined to their homes with influenza.

Dr. U. S. Wasson, Moorhead, was a recent visitor to Greenwood.

Drs. P. R. Polk and F. M. Holloman, Morgan City, and Edgar Giles, Avalon, are frequent visitors to Greenwood.

Dr. W. M. Duke, Sunnyside, is a frequent visitor in the home of his daughter, Mrs. John Hinman of this city.

Dr. E. C. Mabry, Carrollton, Route 3, was a recent visitor to Greenwood.

Dr. J. M. Davis, Memphis, spent Thanksgiving with friends in Greenwood.

Dr. G. Y. Gillespie, Jr., spent Sunday after Thanksgiving with his father in Duckhill.

We deeply sympathize with Dr. G. H. Wood, Batesville, county editor of Panola County, in the loss of his wife early in October.

W. B. Dickins, County Editor.
Greenwood, December 8, 1932.

LINCOLN COUNTY

All county health officers in the Seventh Congressional District were in attendance upon the State Health Conference in Jackson with one exception, Dr. J. C. McGehee, Franklin County, who has influenza—a good record.

Dr. W. R. May and inspector J. W. Ware of Lincoln County attended the health conference.

Dr. W. H. Frizell, member of the State Board of Health from the Seventh District, attended the Conference of Health Officers and also the December meeting of the State Board of Health in Jackson on December 12 and 13.

W. H. Frizell, County Editor.
Brookhaven, December 13, 1932.

LOWNDES COUNTY.....J. W. Lipscomb, Editor
MADISON COUNTY.....Robert Smith, Editor
MARION COUNTY.....J. G. Gardner, Editor
MARSHALL COUNTY.....D. R. Moore, Editor

MONROE COUNTY

I feel very much like dodging you this time, but "duty calls—I must obey." We have nothing on our hands or mind but "hard times." Personally I have had nothing else for some months; for I am directing a relief campaign.

I did not go to Birmingham and I regret so much missing the contacts with my friends whom I expected to see there. Very few of our group went. Dr. M. Q. Ewing and his wife went from Amory. Besides them I know of no others in our county that did go. And Dr. Ewing's going was turned into sorrow since he was notified of his only brother's death soon after his arrival in the city. He left immediately for Washington, D. C., where his brother was buried in Arlington, he being a disabled veteran at time of his death.

The next and only other thing of interest that I know of is the fact that our society (Northeast Mississippi Thirteen Counties) will hold its fourth quarterly meeting at Aberdeen on the third Tuesday of this month, December 20. We expect a great time and many friends to meet with us. I will try to cover this meeting in my next report.

Tax-paying time comes on apace and unless some relief is forthcoming, many, many homes will be in line for forfeit. Our doctors are hard hit. Perhaps to a greater degree than any other class. I think I hear you say, "Come now, why not be an optimist?"

So I duck and say, "A Merry Christmas and a Happy New Year."

G. S. Bryan, County Editor.

Amory, December 6, 1932.

MONTGOMERY COUNTY.....J. O. Ringold, Editor
 NESHOBIA COUNTY.....W. R. Hand, Editor
 NEWTON COUNTY.....S. A. Majure, Editor
 NOXUBEE COUNTY.....E. M. Murphey, Editor
 OKTIBBEHA COUNTY.....H. L. Scales, Editor

PANOLA COUNTY

Dr. John Walton, Como, a retired physician, died some days ago. He had been in bad health for some time.

Dr. J. P. Stavall, Sardis, has been seriously ill. His many friends will be glad to know that he is able to be up at present.

Dr. J. M. Anderson, Sardis, has been appointed local surgeon for the I. C. R. R. Co., to fill a vacancy caused by the death of his former partner, Dr. Edwin Wright.

G. H. Wood, County Editor.

Batesville, December 9, 1932.

PEARL RIVER COUNTY.....G. E. Godman, Editor
 PERRY COUNTY.....B. T. Robinson, Editor

PIKE COUNTY

The following nurses from Pike County attended the State Nurses' Association meeting in Biloxi, November 1 and 2: Miss Inez Driskell, Miss Fay Miller, Miss Marjorie Ann Patterson, Miss Evelyn Morgan, Miss Loraine Scheuermann, Miss Sadie Godbold, all of McComb. Miss Driskell presented a paper on "Maternal Hygiene;" Miss Scheuermann presented a paper on "High Lights of the Wednesday Night Meeting;" Miss Patterson

presented a paper on "The Inspiration of Meeting National Leaders."

Dr. Clarence L. Scamman of the Commonwealth Fund, New York, visited Pike County on November 18, spending the greater portion of this day in consultation with Pike County physicians. He remained until November 19, spending the second day in his routine observation of the work of the Pike County Health Department. Dr. Felix J. Underwood and Dr. J. A. Milne visited the department with Dr. Scamman.

Dr. T. Paul Haney and Dr. J. S. Kamper of the Pike County Health Department attended the organization meeting of the Southern Branch of the American Public Health Association in Birmingham, Alabama, November 14, 15, and 16.

Dr. Robertson makes a most pleasing report of his post-graduate work in Tulane. He will be there for about three more months.

T. Paul Haney, County Editor.

McComb, December 6, 1932.

PONTOTOC COUNTY

We are having some diphtheria now, but not as much as we did last winter. We have inoculated about 2,000 children against it this year, and so far as we have been able to check, we've had only four cases developed after having the inoculations and they were before it had had time to have full effect.

We have given 6,763 inoculations against typhoid fever this year also.

We have had very little flu up until a week or ten days ago, but from reports coming in from all over the county it seems to be increasing. However, the majority of cases seem to be in a mild form.

Seven of the Tupelo doctors and the local doctors and dentists of Pontotoc were royally entertained at the Crausby Cafe on November 30, by one of our local nurses, Mrs. G. W. Crausby.

R. P. Donaldson, County Editor.

Pontotoc, December 7, 1932.

PRENTISS COUNTY

Dr. S. L. Pharr is recovering nicely following an appendectomy several weeks ago.

Drs. Warr, Gotten and Henderson of Memphis, and Dr. Charles Murray of Ripley were professional visitors to Booneville during November.

Drs. L. L. McDougal, R. B. Caldwell, and R. B. Cunningham made a business trip to Meridian last month.

Dr. J. L. Kellum is now located at Baldwyn, doing general practice.

We have quite an epidemic of influenza in the county, but fortunately the disease does not seem so severe as in previous epidemics.

R. B. Cunningham, County Editor.

Booneville, December 7, 1932.

QUITMAN COUNTY

The Quitman County doctors who attended the series of lectures given in Clarksdale by Dr. McCord of Atlanta, Ga., were Drs. Covington and Franks of Marks, Oliver and House of Sledge, Gillespie, Walker, and McVey of Lambert. The lectures were very interesting and instructive and I feel sure that each physician who attended was benefited by Dr. McCord's able talks. We hope to have more in the future.

Right now we are in the midst of a mild epidemic of influenza. This epidemic is seriously interfering with our hunting. However, Dr. Gillespie was fortunate enough to bag a "buck" on his first day out.

E. A. McVey, County Editor.

Lambert, December 10, 1932.

RANKIN COUNTY.....W. H. Watson, Editor
SCOTT COUNTY.....W. C. Anderson, Editor

SHARKEY COUNTY

The doctors of Sharkey County have been staying at home so closely lately that we have not sent in any news.

Dr. J. K. Avent of Grenada and party of friends came over for goose hunting at the beginning of the season. The doctor especially enjoyed the outing away from daily routine of his busy life.

Dr. H. S. Goodman and family, Cary, will spend the Christmas holidays with relatives in Virginia.

Our efficient health unit is very busy doing vaccinations.

Dr. R. N. Whitfield, Jackson was a visitor in Rolling Fork at the county health office in interest of his department, vital statistics.

Miss Mary D. Osborne, Jackson, visited Rolling Fork recently and held a meeting of the midwives of the county.

W. C. Pool, County Editor.

Cary, December 10, 1932.

SIMPSON COUNTY

The absence of a Simpson County news report in the December number of the Journal was not due to any oversight or laziness on my part, but to a faulty address. And I know that this is a late time to Merry Christmas anyone but my sincerest wish is that all doctors affiliated with us may have the most joyous Christmas ever. May peace, at this time, be to you all.

Drs. M. O. Currie and E. L. Walker, Magee, attended a meeting of the Central Medical Society in Jackson last month.

Dr. M. M. Magee, Magee, visited in Avery last week.

Weather conditions are aggravating a number of cases of influenza in the county. It seems

that some of our schools are likely to be closed on this account. I hope that all our doctors may escape this malady and remain able to take care of all victims.

Emmet D. Kemp, Jr., son of Dr. E. D. Kemp, Sanatorium, was home for the Thanksgiving holidays.

Dr. E. L. Walker, Magee, and son, L. D. Walker, enjoyed a week of successful deer hunting in November.

Dr. W. W. Diamond, Magee, informs us that all at the hospital is going well at present.

I, in behalf of my co-workers of Simpson County and myself, take this opportunity to wish you a more prosperous and happy new year. Yes, a thousand times more prosperous than the outgoing year.

E. L. Walker, County Editor.

Magee, December 14, 1932.

SIMPSON COUNTY.....S. F. Strain, Editor
SMITH COUNTY.....R. B. Boykin, Editor
STONE COUNTY.....S. E. Dunlap, Editor
SUNFLOWER.....R. M. Donald, Editor

TALLAHATCHIE COUNTY

Meant to give you this little notice first of week but had mild flu infection and hence am delayed.

Dr. J. G. Backstrom and myself, from Tutwiler, went to Jackson October 12 to be interviewed by Dr. C. L. Scamman of New York with reference to scholarship in Commonwealth Fund. Understand there are 144 applications for the four scholarships of the state at large. The lucky applicants will be notified around 5th to 10th of December.

I as part time county health officer for Tallahatchie County, have given 500 doses of typhoid vaccine and 70 doses of toxoid thus far this month. Not a case of contagious disease reported this week in the county. Saw some 300 cases of influenza in Parchman Penal farm this week with Dr. P. W. McDavid, the resident physician and surgeon.

T. F. Clay, County Editor.

Tutwiler, November 19, 1932.

TATE COUNTY.....W. D. Smith, Editor
TIPPAH COUNTY.....C. M. Murry, Editor
TISHOMINGO COUNTY.....A. E. Bostick, Editor
TUNICA COUNTY.....N. B. Jernberg, Editor
UNION COUNTY.....H. P. Boswell, Editor
WALTHALL COUNTY.....B. L. Crawford, Editor
WARREN COUNTY.....E. H. Jones, Editor
WASHINGTON COUNTY.....F. M. Acree, Editor
WAYNE COUNTY.....W. P. Gray, Editor
WEBSTER COUNTY.....W. H. Curry, Editor

WILKINSON COUNTY

The one big news item from this county is an announcement—Born to Dr. and Mrs. Charles E. Catchings of Woodville, at Field Memorial Hospital on December 2, a fine seven-pound girl. The doctor is mighty proud of his first-born.

Dr. J. W. Brandon, Woodville, has been confined to his bed with flu but we are glad to report that he is up and at work again.

S. E. Field, County Editor.

Centreville, December 9, 1932.

WINSTON COUNTY

The Winston County Medical Fraternity met the second Tuesday at 3 P. M., in regular meeting. Matters concerning the profession were discussed, dealing with the problems confronting the physician financially. Dr. E. L. Richardson read a paper on medical ethics and it was discussed by Dr. T. F. Kilpatrick.

We have had quite a few cases of flu in this vicinity, also some scarlet fever.

Dr. W. A. Young, East Louisville, was in the city this week. He says collections consist largely of hogs and syrup.

Dr. C. A. Kirk of Fearn Springs was in our city with his wife shopping this week.

Dr. T. L. Parks was in the city on business from Fearn Springs neighborhood this week.

Dr. S. W. Pearson was in Memphis recently on business.

Mrs. T. C. Ballard, Starkville, visited her father, the writer, last week-end.

All we hear is hard times and taxes about us. Oh! That we could go some place and be cheered up for a time.

Most of the doctors of our city are expecting to be at the next medical meeting at Meridian the 15th of this month.

M. L. Montgomery, County Editor.

Louisville, December 8, 1932.

YALOBUSHA COUNTY.....G. A. Brown, Editor

YAZOO COUNTY.....C. M. Coker, Editor

NURSING CHARGES CUT

At a meeting of the Vicksburg Sanitarium Nurses Alumnae Association on December 5, reductions in fees charged for nursing service were announced. The new rate sheet shows a reduction from six to five dollars for twelve hour duty; eight to seven dollars for 24-hour duty; eight to seven dollars for twelve hour duty in obstetrical cases; and nine to eight dollars for 24-hour duty in obstetrical cases.

Miss Mae Scharborough, president, presided and Miss Mary Ruth Millsaps served as secretary.

IN MEMORIAM

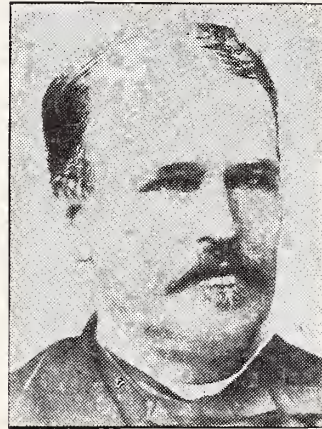


LEWIS M. KITCHENS, M. D.

Strayhorn, Mississippi.

Died of influenza, October 31st, 1918, in a British Hospital, just five days after arriving in France.

LEST WE FORGET THEIR GOOD WORKS



S. V. D. HILL, M. D.

Macon, Mississippi

President Mississippi State Medical Association, 1870-1

Samuel Van Dyke Hill was born in Nashville, Tenn., July 25, 1835, and died at the home of his brother, Ewing Hill, in St. Louis, October 14th, 1889. His father was Dr. D. B. Hill of Nashville and his mother, Margaret J. Stout, a sister of the late Dr. S. H. Stout of Dallas, Texas, sometime Medical Director of the Western Division of the Confederate Army. The father was of English, and the mother of Dutch, ancestry.

When S. V. D. Hill was quite a boy his father moved to Clay County, Miss., in the neighborhood of West Point, and here the subject of this sketch passed his youth. In 1854 he began the study of medicine in Louisville, going from thence to New York, where he was graduated from the University

of New York in 1856, returning to Clay County. He was married October 14, 1861, to Miss Jenny Calvert of Palo Alto, and with his bride went immediately to Richmond, Va., where he had been assigned duty in Quintard Hospital. The young couple spent part of their honeymoon in a log cabin on the battlefield of Bull Run and later served together in Kentucky, Virginia and Georgia, being paroled at Meridian, Miss., from which place they went to Macon, where Dr. Hill practiced until his death, being associated part of the time with Dr. H. A. Minor.

While always engaged in general practice, Dr. Hill was especially noted for his ability as a diagnostician. His partner, Dr. Minor, writes of his ability in this direction, "He was the best I ever met." He was a member of the national association and frequently a delegate to its sessions. He also represented his state at an international medical congress at Washington, was one of the promoters of our first quarantine laws and served as censor of his district under the early registration laws. He was vice-president of the State Association 1869-70 and a member of its Judicial Council 1886-1889, and a member of the first Board of Health. Besides his wife, two daughters survive him, Mrs. Sallie Vick Jones of New York and Mrs. Maggie Barry of Sherman, Texas.

Dr. Hill had a striking and pleasing personality. His head was massive and his features strong, but refined and sensitive. In repose his face showed the student and thinker. A distinguished Mississippian, who represented his state at Washington and was for many years in public life, once said that he had known personally three great intellects: Thos. J. Carlisle, Samuel J. Randall and Dr. Van Hill.

Mrs. Maggie Barry, 1910

NOTE—If anyone knows of any additions to corrections that should be made to the above sketch, please communicate with Dr. E. F. Howard, Historian, Vicksburg.

MISSISSIPPI STATE CHARITY HOSPITAL, VICKSBURG

At a meeting of the Board of Trustees of the Mississippi State Charity Hospital, Vicksburg, on December 6, staff membership was announced as follows:

Surgeon in Charge.—Dr. A. J. Podesta, Vicksburg.

Surgery.—Drs. B. B. Martin, J. A. K. Birchett, Jr., H. B. Goodman, J. S. Camp, Vicksburg, and W. C. Pool, Cary.

Medicine.—Drs. P. S. Herring, L. J. Clark, B. I. Hicks, Vicksburg; Percy Hudson, Utica; H. S. Goodman, Cary; R. A. Segrest, Port Gibson; W. L. Ervin, Inverness; J. S. Austin, Oak Ridge; B. R. Clark, Lorman.

Eye, Ear, Nose and Throat.—Drs. E. F. Howard, and C. J. Edwards, Vicksburg.

Roentgenology.—Dr. S. Myers, Vicksburg.

Pediatrics.—Drs. V. Bonelli, S. Myers, Vicksburg; R. B. Harper, Fayette.

Obstetrics.—Drs. Sol. Kaufman, Vicksburg; C. L. Green, Utica; G. W. Gaines, Tallulah, La.

Genito-Urinary.—Dr. M. J. Few, Rolling Fork.

Public Health.—Dr. F. M. Smith, Vicksburg.

Dental Surgery.—Drs. J. B. Askew, R. C. Kincaid, Vicksburg.

Chaplain.—Rev. Gordon M. Reese; Assistant Chaplain, Rev. J. L. Boyd, Vicksburg.

The Members of the Board of Trustees, who attend meetings with remarkable regularity and have been helpful in every possible way, are Frank H. Andrews, Col. Alexander Fitz-Hugh, R. Arnot Geary, Dr. Sylvan Myers, and M. T. Morrissey, Vicksburg; Paul Ratcliff, Raymond, and Mrs. C. C. King, Jackson.

ACKNOWLEDGEMENT

Receipt of the following reprints from the Southern Medical Journal are gratefully acknowledged:

Congenital Absence of Part of the Abdominal Wall, by H. A. Gamble, M. D., F. A. C. S., Greenville, Mississippi.

The Treatment of the Potentially Infected Abdominal Wound, and Its Relationship to the Mortality of Acute Infections of the Abdomen, by H. A. Gamble, M. D., F. A. C. S., Greenville, Mississippi.

Ablatio Placentae, by John F. Lucas, M. D., Greenville, Mississippi.

EXPERT WITNESS TELLS THE TRUTH ABOUT HIMSELF

(From the Vicksburg Evening Post, December 14, 1932)

"Dr..... was put on by the state as the first witness in rebuttal. He stated he had had 33 years' experience in studying mental diseases.

"Witness said his belief about the mental attacks suffered by Cole was due to acute alcoholism."

WOMEN'S AUXILIARY TO THE MISSISSIPPI STATE MEDICAL ASSOCIATION

President—Mrs. W. C. Pool, Cary.

President-elect—Mrs. M. L. VanAlstine, Jackson.

State Convention, Jackson, May 9, 10, 11, 1933.

Mrs. Leon S. Lippincott, Vicksburg, Press and Publicity Chairman.

FROM OUR PRESIDENT

November 2 the auxiliary to the Clarksdale and Six Counties Medical Society met in Clarksdale

at the American Legion Hall, where a splendid program was rendered and thoroughly enjoyed. This auxiliary was most thoughtful and presented me with a beautiful corsage of flowers, which was appreciated more than I can express. The auxiliary elected officers and they are making plans to go forward with the work. The graciousness of the hostess made me very reluctant to leave, but other plans had to be carried out.

November 3 was spent at Greenville with a group of the physicians' wives. While there I was also the guest in the home of Dr. and Mrs. L. C. Davis, who are friends of long standing.

November 22 I had the pleasure of spending the day with Mrs. W. H. Frizell, Brookhaven, and attended the regular meeting of the Women's Auxiliary. The program was splendid. It was given by the daughters of two of the members. The performers were very young, but the ability shown was much beyond their few years. This auxiliary has plans for its program and local work which are most interesting and will prove to be very beneficial. The courtesies of this group to me were many.

December 7, I went to Gulfport. Spent the day with Mrs. Dan Williams, the first president of our state auxiliary, and attended a business meeting of the Harrison-Stone-Hancock Counties Medical Auxiliary in the beautiful home of Dr. and Mrs. E. C. Parker, which was followed by a tea. The gracious hostess had been untiring in her efforts and generous with invitations, including all the doctors' wives of the four counties, Harrison, Stone, Hancock and Jackson. The work accomplished by this auxiliary is very outstanding.

This completes my visits to the different districts and each auxiliary with one exception, Pike county, where I will go later.

I want to especially commend our councilor of the eighth district, Mrs. L. S. Gaudet, Natchez, as she was the first to have an auxiliary to each Medical Society. Congratulations also go to the Second District Councilor, Mrs. H. L. Cockerham, Gunnison. I sincerely trust the others will soon have their districts in such standing.

I thank each and every one of you for your co-operation and I sincerely hope that we shall have many more added to our list before another year passes.

I thank you.

Mrs. W. C. Pool.

Cary, December 10, 1932.

WOMEN'S AUXILIARY TO THE HARRISON-STONE-HANCOCK COUNTIES MEDICAL SOCIETY

Mrs. W. C. Pool, Cary, President of the Women's Auxiliary to the Mississippi State Medical Association made an official visitation at the regular meeting of the Women's Auxiliary to the

Harrison-Stone-Hancock Counties Medical Society at the home of Mrs. E. C. Parker, East Beach, Gulfport, on December 7. Mrs. Pool outlined the work of the auxiliary suggested by the Women's Auxiliary to the American Medical Association, suggesting special work for auxiliaries in Mississippi which included health work and preventorium activity. Mrs. Pool suggested that the constitution and by-laws of the local auxiliary be revised to correspond with the new State Auxiliary Constitution and By-Laws, and Mrs. J. A. Devitt, Mrs. R. E. Longino and Mrs. G. G. Beckett were named as the revision committee.

Mrs. R. C. Eley, Moss Point, and Mrs. S. E. McIlwain, Pascagoula, were guests at the meeting, coming to confer with Mrs. Pool relative to the organization of an auxiliary in Jackson county, and to observe the work of the local auxiliary. Other guests included Mrs. E. H. Long, South Vienna, Ohio, Mrs. J. C. McNair, Mississippi City, and Mrs. R. W. Gay, St. Louis.

Officers for the year of 1933 were elected as follows:

President—Mrs. Geo. Melvin (re-elected).

President-elect—Mrs. D. J. Williams.

Secretary—Mrs. Elmer Gay (re-elected).

Parliamentarian—Mrs. C. G. Beckett.

Historian—Dr. Emma Gay.

A report of the work of the auxiliary at the King's Daughters' Hospital, Gulfport, showed that several rooms had been painted and finished, and the hall and the utility room on the first floor painted. About \$85.00 has been expended on this work. In addition the auxiliary made and hung about 40 pairs of curtains and painted the trellis on the grounds. At the close of the meeting, Mrs. Parker, assisted by Mrs. Idalee Cowling, served refreshments. The reception suite was decorated in the Christmas motif and all appointments anticipated the season.

Mrs. Pool was the guest of Mrs. D. J. Williams, East Beach, during her stay on the coast.

Dr. and Mrs. Dan Williams spent the week of December 12 at Sanatorium where Mrs. Williams was the guest of Mrs. Henry Boswell, while Dr. Dan attended the Health Conference at Jackson.

The Women's Auxiliary to the Harrison-Stone-Hancock Counties Medical Society was highly complimented by our president, Mrs. Pool, upon her visit on December 7. She fully appreciates the atmosphere of co-operation and friendliness which is so essential if any good is to come of the organization. We were delighted to have her and appreciate her untiring efforts in "putting over" her job this year.

Mrs. Maude H. Williams
Gulfport, December 9, 1932.

LAMAR COUNTY

Dr. and Mrs. L. L. Polk, Purvis, attended the meeting of the Southern Medical Association after which Mrs. Polk made a visit to her old home town, Macon, Ga. While there she had the great pleasure of being honor guest at the meeting of the Bibb County Auxiliary, which is a very active organization, meeting monthly at the homes of members. At this meeting Dr. J. A. Shelden spoke on "Sight Conservation." Mrs. Bonar White, Atlanta, president-elect of the Women's Auxiliary to the Georgia Medical Association, and Mrs. Polk, who is past president of the Women's Auxiliary to the Mississippi State Medical Association, were guests. Mrs. Polk was invited to attend the meeting of the Women's Auxiliary to the Georgia State Medical Association in Macon next May.

Mrs. L. L. Polk.

Furvis, December 8, 1932.

WASHINGTON COUNTY UNIT OF THE WOMEN'S AUXILIARY TO THE DELTA MEDICAL SOCIETY

The Washington County Unit of the Women's Auxiliary to the Delta Medical Society was organized at a luncheon meeting held at the Country Club, Greenville, Wednesday, November 16. The president, Mrs. John A. Beals, opened the meeting with an exposition of the tentative by-laws of the Delta Auxiliary, after which informative minutes of the organization meeting of the Women's Auxiliary to the Delta Medical Society held in October in Greenwood were read by the secretary, Mrs. J. C. Pegues. General discussion and questions followed, after which the president called for an expression of the will of the meeting. This was answered by a motion by Mrs. O. H. Peck that a Washington County Unit be organized. This was put through with unanimous vote, the dues of the unit to be 75 cents per year. Mrs. Davis, a member of the preliminary committee on arrangements, was then asked for an expression as to the type of meeting. A luncheon meeting was suggested and duly voted as satisfactory. It was then moved and passed that the unit should convene monthly on the first Wednesday of each month, beginning January 4, 1933.

It was then announced that a number of ladies have signified membership, although unable to be present at this organization meeting. These were as follows: Mrs. T. B. Lewis, Mrs. C. P. Thompson, Mrs. Ferguson, Greenville, Mrs. Wm. P. Shackelford, Hollandale, Mrs. W. T. Duke, Glen Allen, Mrs. Crockett, Winterville.

The following committees were then appointed by the president: Program, Mrs. A. G. Payne, chairman, Mrs. C. P. Thompson, Mrs. Miller, Mrs. Pegues; Entertainment and Ways and Means Committee, Mrs. L. C. Davis, chairman, Mrs. F. M. Acree, Mrs. R. E. Wilson, Mrs. G. W. Eubanks,

Mrs. Wm. P. Shackelford, Hollandale, Mrs. W. T. Duke, Glen Allen; Membership and Hygeia Committee, Mrs. J. B. Hirsch, chairman, Mrs. O. H. Beck, Mrs. John Baldwin, Mrs. H. A. Gamble, Mrs. T. B. Lewis; Executive Committee, Mrs. John A. Beals, Mrs. J. C. Pegues, Mrs. A. G. Payne, Mrs. L. C. Davis and Mrs. J. B. Hirsch. Mrs. J. C. Pegues was appointed reporter. No other business being brought up, the meeting adjourned until January 4, 1933.

Those present at the luncheon meeting were: Mrs. L. C. Davis, Mrs. F. M. Acree, Mrs. A. G. Payne, Mrs. J. B. Hirsch, Mrs. H. A. Gamble, Mrs. O. H. Beck, Mrs. John Baldwin, Mrs. G. W. Eubanks, Mrs. H. D. Miller, Lamont, Mrs. J. C. Pegues, Mrs. R. E. Wilson and Mrs. John A. Beals.

The president wishes to express her appreciation of the interest and fellowship exhibited by all present in the new organization. Greenville, November 24, 1932.

THE WOMEN'S AUXILIARY TO THE ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY

The Women's Auxiliary to the Issaquena-Sharkey-Warren Counties Medical Society held the annual election of officers at a luncheon meeting at the Vicksburg Hotel, December 13, with 20 members and four visitors from the medical society present.

An interesting and entertaining program was rendered during a delicious four-course luncheon, beginning by all singing the Christmas Carols, "Hark, The Herald Angels Sing" and "Silent Night," accompanied on the piano by Mrs. Willard Parsons, and with Mrs. Laurence Clark leading. Mrs. Sydney Johnston read most effectively a paper on "The Origin of Christmas Customs." Following a delightful pianologue, "Why," by Mrs. Willard Parsons, Mrs. Laurence Clark, as Santa Claus, added a surprise feature to the program bringing gifts to all by the way of clever little verses appropriate to each recipient. Dr. W. G. Weston, vice-president of the local medical society in the absence of the president, Dr. H. S. Goodman, brought greetings from the society. Dr. Leon S. Lippincott told of the relation of the auxiliary to the medical society, along with some good advice. Dr. E. F. Howard, in his usual charming manner, spoke of the activities of the auxiliary members, especially commending the splendid work of the president, Mrs. W. C. Pool, who is also carrying on the work of president of the Women's Auxiliary to the Mississippi State Medical Association. Dr. Willard Bartlett, Jr., of St. Louis, Mo., who was one of the speakers at the medical meeting held that same evening, was also a guest and spoke of the activities of the National Auxiliary of which he is personally well informed, since his mother was one of the early workers in the organization, and is now

actively engaged in compiling data for a complete history of the national organization. At the conclusion of the social part of the meeting, a business session was held and reports for the year from the various chairmen were given. The following officers were unanimously elected for the year of 1933:

President—Mrs. S. W. Johnston, Vicksburg.

President-elect—Mrs. H. S. Goodman, Cary.

First Vice-President—Mrs. M. J. Few, Rolling Fork.

Second Vice-President—Mrs. D. A. Pettit, Vicksburg.

Third Vice-President—Mrs. J. B. Benton, Valley Park.

Secretary—Mrs. I. C. Knox, Vicksburg.

Treasurer—Mrs. H. H. Haralson, Vicksburg.

Parliamentarian—Mrs. E. F. Howard, Vicksburg.

Press and Publicity Chairman—Mrs. L. J. Clark, Vicksburg.

Mrs. Pool, the retiring president, was given a rising vote of thanks for her most efficient service during the past year.

Mrs. L. J. Clark.

Vicksburg, December 14, 1932.

HONOR ROLL

The following have furnished the material for the Mississippi section of our Journal this month:

COUNTY EDITORS: L. Wallin; W. A. Johns; J. James; T. J. Brown; D. H. Ward; W. F. Hand; W. H. Scudder; B. S. McIlwain; J. E. Green; A. M. McCarthy; C. T. Burt; W. B. Dickens; W. H. Frizzell; G. S. Bryan; G. H. Wood; T. Paul Haney, Jr.; R. P. Donaldson; R. B. Cunningham; E. A. McVey; W. C. Pool; T. W. Clay; S. E. Field; M. L. Montgomery.—23.

COUNTY SOCIETIES: Central (Robin Harris); Clarksdale and Six Counties (V. B. Harrison); East Mississippi (T. L. Bennett); Harrison-Stone-Hancock (D. H. Ward); Issaquena-Sharkey-Warren; Northeast Mississippi Thirteen Counties (J. M. Acker, Jr.); North Mississippi (A. H. Little); Pike County (T. P. Haney, Jr.); South Mississippi (J. P. Culpepper, Jr.); Tri-County (W. H. Frizzell).—10.

OTHER CONTRIBUTORS: L. L. Minor; G. M. Street; J. S. Ullman; Mrs. L. L. Polk; Mrs. L. J. Clark; F. J. Underwood; E. F. Howard; Mrs. D. J. Williams; Mrs. W. C. Pool.—9.

HOSPITALS: Anderson Infirmary (C. T. Burt); Mississippi State Charity Hospital, Vicksburg; Northeast Mississippi Hospital (R. B. Cunningham); Vicksburg Sanitarium; Mississippi State Hospital, Jackson (J. S. Hickman).—5.

GRAND TOTAL—47. THANK YOU.

A HAPPY AND PROSPEROUS NEW YEAR.

BOOK REVIEWS

Diagnosis and Treatment of Diseases of the Thyroid Gland: By George Crile and Associates. Philadelphia, W. B. Saunders Co. 1932. Illus. pp. 508.

Many parts of this volume will be well worth reading by those interested in the clinical or surgical phases of the thyroid gland. An excellent review of the literature concerning iodine and the thyroid gland is given by George Crile, Jr. There are chapters devoted to goiter from the standpoint of the clinician, pediatrician, cardiologist, ophthalmologist, dermatologist and roentgenologist and each of these is written by an associate of Dr. Crile especially experienced in that particular phase of the goiter problem. Cretinism, myxedema and malignancy of the thyroid glands are also discussed. Preoperative and postoperative management are considered and the technic of thyroidectomy itself. In the chapter on the indications for operation, Dr. Crile says that the only positive contraindication to thyroidectomy is persistent delirium. In the Crile clinic's "Series of 12,690 cases of thyroidism subjected to and recovering from operation ninety-seven per cent are in good or fair condition one year or more after operation."

Eighty-six and three-tenths per cent of the patients resumed their normal occupation in less than a year after operation. A volume on the thyroid from the Crile clinic is certainly of interest. Of more clinical than theoretical value, it is by no means exhaustive and it is more a convenient resumé of the subject than an extensive handbook to all our present-day theory and knowledge of the thyroid gland and its diseases.

HOWARD R. MAHORNER, M. D.

Anatomy of the Brain and Spinal Cord: By William W. Looney, A. B., M. D. Philadelphia, F. A. Davis Co. 1932. pp. 370, figs. 153.

In this text-book neuroanatomy is presented in a simplified, compact form, with the evident aim of providing an immediately practical working knowledge of the subject. The concluding chapter is devoted to a series of twelve case histories, in each of which the clinical findings are interpreted in terms of the paths blocked by the respective lesions; this material not only affords the student an illustration of the manner in which functional anatomy is applied in diagnosis but it vivifies the mechanisms involved. It is to be

regretted that the extrapyramidal paths are not discussed collectively as a system, and that other matters as worthy of extended consideration in a text designed for medical students, such as the "third circulation," are accorded so little attention.

HAROLD CUMMINS, Ph. D.

Functional Disturbances of the Heart: By Harlow Brooks, M. D. Philadelphia and London, J. B. Lippincott Company. 1932. pp. 288. Price, \$5.00.

This is one of a series of monographs intended for the general practitioner, edited by the author of this particular volume, Dr. H. Brooks. It presents in a clear, easily readable style that is certainly not too scientific, a discussion of those borderline cardiac disturbances in which there are no definite recognizable pathological lesions "in so far as can be determined by our present methods of study."

The attempt to discuss and differentiate these conditions is certainly a praise-worthy one, inasmuch as such conditions tax all the ability, knowledge and ingenuity of the physician. Mistakes are made every day in labelling functional disturbances, of no serious import, as dangerous organic ones, and assuring individuals with true organic cardiac pathology that there is absolutely nothing wrong with them. Often one has the misfortune to have the error of his opinion in the latter case very forcefully impressed upon him by the sudden unexpected death of the patient.

The importance of the psychological approach and management of such patients is emphasized. The author stresses the importance of a well taken history, and offers the very sage advice that often, to avoid prejudice, the physical examination should be done before a detailed history is taken. This is a practice employed by many outstanding internists, contrary to the usually accepted routine. The manner of history taking and conduct of the physical examination is discussed in detail.

Each type of disturbance presented is described, followed by a discussion as to diagnosis, prognosis and treatment. Such topics as anxiety angina, paroxysmal tachycardia, effects of the emotions, heart in early hyperthyroidism, cardiac neuroses, and neurocirculatory asthenia are some of the chapter headings. The chapter on neurocirculatory asthenia is especially lengthy, being a subject the author has been particularly interested in.

The subject matter is presented, as stated by Dr. Brooks from the viewpoint of an internist rather than a cardiologist, inasmuch as the entire organism must always be considered. There are very few references to the literature, the material being conclusions and observations from the author's own experience.

WILLARD R. WIRTH, M. D.

Preventive Medicine: By Mark F. Boyd, M. D., M. S., C. P. H. 4th ed. reset. Philadelphia, W. B. Saunders Company. 1932. pp. 532. Price, \$4.50.

That Boyd's *Preventive Medicine* has gone into its fourth edition is evidence of its continued usefulness to the medical profession and to undergraduate students in particular.

It is gratifying to see each new edition recognize the growing importance of the general practitioner in preventive medicine and to see that the author has widened the scope of his subject matter to include the heretofore much neglected aspects of hygiene in specific age and social groups.

The chapters on Preventive Obstetrics and Dentistry and the inclusion of discussions on heredity, childhood defects and adult personal hygiene go far toward stimulating the student and practitioner in his interest in the prevention of disease.

Since the author himself recognizes that his work cannot encompass all of the details of public health and sanitation, it is to be hoped that, while retaining the essentials of these aspects of preventive medicine in future editions, he will enlarge on the opportunities and responsibilities of the general practitioner.

The practical nature of Boyd's *Preventive Medicine* is its own highest recommendation.

W. H. PERKINS, M. D.

Pathology for Nurses: By Eugene C. Piette, M. D. Philadelphia, F. A. Davis Co. 1932. pp. 251, illus. Price, \$1.75.

The reviewer finds this book by Dr. Eugene C. Piette more than suitable for the purpose for which it is written. It covers the subject well. The author's description of the pathological lesions and his clinical explanations are good. The part which is most interesting and quite appropriate, is in the last chapter, wherein the author gives a summary of the collecting and handling of specimens. This procedure cannot be stressed too much to the nurse, because it is very important.

A. V. FRIEDRICHS, M. D.

Surgical Pathology of the Female Generative Organs: By Arthur E. Hertzler, M. D. Philadelphia, J. B. Lippincott Company. 1932. Illus. pp. 346. Price, \$5.00.

There are two varieties of medical books. The first variety is a compilation like Ewing's *Neoplastic Diseases*, which includes practically all that is known on a certain subject but which largely subordinates the author's personal views and personal opinions. This is the best kind of medical reference book for students and practitioners alike. This is an exceedingly useful form of medical literature, and the physician whose purchases must

be limited would do well to choose it first of all. The second type of book—which the English are particularly given to producing—is an account of the author's personal views and opinions, with little or no regard for the opinions of other people. This sort of book is advanced reading, not for the student or perhaps even for the young practitioner, but of very great value for the advanced student or for the medical man who has had enough years of practice to enable him to read selectively, to separate the what from the chaff, though it is of value, of course, only in proportion to the experience and the wisdom of its author.

Hertzler's book on the surgical pathology of the female generative organs belongs, by his own admission, in the second classification.

The validity of a book based upon such premises as these depends, as has already been pointed out, entirely upon what the author of it has seen, and with what this particular writer has seen there can be no quarrel. Hertzler is a very distinguished surgeon, but he is also a very sound pathologist. He was a pathologist before he was a surgeon, and his experience is perhaps as extensive as that of any living man. He is learned in the sense that he is thoroughly familiar with the pathologic literature of the world, but he is not in the least awed by it. He casts tradition to the winds. He does not hesitate to disagree with any opinion if his own experience does not corroborate it. He has very decided views of his own, and he does not hesitate to express them. Indeed, his frank decisiveness is not the least commendable thing about his book.

To write of specific things, one is impressed by the simplicity of his classification of cysts of the ovary. A pathologist who is not a surgeon might perhaps complain of its simplicity, but a surgeon, confronted with the practical considerations of these tumors, would find in it all that he needs to guide him. "A surgeon," writes Hertzler, "can walk about a museum collection of ovarian tumors and pick his way with a fair degree of accuracy, provided that he does not know too much." "In order to escape the confusion of the rare lesions it is particularly necessary that the surgeon be guided almost exclusively by clinical experience." Of tubal pregnancy he writes with equal sanity: "Much has been written about the antecedents; the old inflammations, the developmental anomalies of the tubes, previously existing sterility, and all that. Such knowledge is essential to the junior student, but to the experienced practitioner it is excess ballast and calculated to hinder rather than to aid the correct interpretation of the lesion in the concrete case." That is a perfectly correct point of view, but it is seldom stated with such refreshing clarity.

The chapter on involutinal states of the ovary could be read with profit by any man who has undertaken the practice of medicine, and it should

be written upon the hearts of the gynecologist and the surgeon who consider gynecology a purely surgical specialty. Not a single one of the lesions described in this particular chapter, says Hertzler, "can be maintained as pathologic in a degree that justifies removal, and there is none in which the removal of the ovary but makes the last state of the patient worse than the first." "The study of the patient before and after the removal of the ovaries is the only way in which one can determine their relation to the well-being of the patient." Plain speaking again, and sound common sense, as is almost every one of his surgical recommendations, for that matter. Pathology is always the basis of treatment, and when there is no pathologic basis for surgery there is in the opinion of this very practical and straightforward surgeon no basis at all for surgery.

Hertzler's gift for the making of pungent phrases is noteworthy. His language is always picturesque; occasionally it is almost too vivid. "The surgeon who feels he has achieved the ideal when he has 'cleaned out the pelvis' has missed his calling: he should have been a taxidermist, whose business it is to preserve only the skin of animals." "Than this (endocrinology) the medical man has never had a thicker veil behind which to hide the many odds and ends of his ignorance." "The laboratory is a magnificent school for the acquisition of science, not a substitute for it." "Pleasant practical relations with the pathologist and not scientific accuracy is the dominant factor in the average operator's mind. This attitude has naturally led many pathologists to lean a little in order to enhance these pleasant relations. Man to man, this striving for harmony is very commendable, but it leads to the removal of organs that never have threatened the life of the patient. The worst of it is that a surgeon flanked by such a pathologist, because of the high percentage of cures, comes to regard himself as a superior operator, and he speeds up his cutting."

The book is attractively printed, and the illustrations are ample and good, most of them being from the author's original drawings and photographs. The photomicrographs of his own specimens are particularly worthy of comment.

This is a book designed for clinicians and not for pathologists, but that is very far from saying that every pathologist could not read it to advantage.

JAMES DAVIDSON RIVES, M. D.

The Purchase of Medical Care Through Fixed Periodic Payments: By Pierce Williams, M. D. New York, National Bureau of Economic Research. 1932. pp. 308.

This volume is one of the publications which has come to us through an organization of physicians, public health specialists, and economists, who have studied the cost of medical care during

the past five years.

The author reviews various compulsory health insurance campaigns which have been unsuccessfully carried on in this country. Enthusiasm and legislative activity apparently subsided on this subject about 1920. Among those who opposed compulsory health insurance were numerous employers, insurance companies, labor organizations, and many physicians. Because many of the plans now being presented are more or less a revival of ideas which failed to gain acceptance some years ago, the evolution of this activity is of especial interest.

The forms of medical service rendered in the lumber, mining, and other industries, throughout the Northwest, West and Central States are discussed in detail. The author also presents at some length the organization plan and working details of medical care offered by several railroads, community health organizations, group clinics, hospitals and medical benefit corporations.

A plan of the operation and service rendered by several commercial and health accident companies, trade unions and sick benefit funds, is also described in detail.

Fixed periodic payments for health service is apparently an experiment in the United States which has many limitations. Although health insurance is compulsory in some of the European countries and industrial compensation has been generally adopted, the reviewer does not believe that the practice of medicine in this country will be materially changed by any or all, of the types of medical practice which the author describes.

This volume will be of interest to physicians to whom the economic phases of medical practice have an appeal. The subject is presented in a very complete and understandable manner and a great deal of material has been carefully studied in its presentation.

CHAS. A. BAHN, M. D.

Control of Conception: By L. R. Dickinson, M. D., and L. F. Bryant, M. D. Baltimore, Williams & Wilkins Co. 1931. pp. 290. Price, \$4.50.

With frankness and dignified tone contraception has drawn attention as world problems. Dickinson and Bryant have published an illustrated medical manual *Control of Conception*. It is a new aspect and enlightenment on a much neglected and almost forgotten problem in our modern medical advancement. Contraceptive clinics have risen to 80 in 1931. The studies are based on statistics, observation and experience, covering also the chemistry, physiology and anatomy of the reproductive factors. Helpful diagrams, clear and concise are helpful to both the general practitioner and specialist. The chapter on pessaries, and especially the intrauterine devices, of which there are many in use today, the latter are spoken of only to be condemned. Many modern methods without un-

sexing are discussed. Caution stricture of the uterine ends of the tubes and heat applied to the testis are well discussed.

Therapeutic abortion is frankly discussed with emphasis being placed on the medical indication for abortion, sterilization and contraception. Plans for clinics and physicians may be useful to individuals or groups who wish to take up this work which should include study of sterility, birth control and marriage advice.

The chapter on birth control laws is well interpreted and gives an up-to-date review of the laws recently passed by Congress.

Those who are interested in the most important of our industries—home making—should procure right texts—texts plain and honest like this one which is unique in its class.

GEO. A. MAYER, M. D.

Individuality of the Blood in Biology and in Clinical and Forensic Medicine: By Leon Lattes. Translated by L. W. Howard Bertie, M. A., B. M., B. Ch. (Oxon.). London, Oxford University Press. 1932. pp. 413. Price, \$7.50.

An English translation of the 1929 French edition of a book that first appeared in Italian in 1923. The English edition has been brought down to date. The distinct interest in the subject matter is shown by the large number of publications, 1,436 in 1929, 2,375 in 1932, listed in the bibliography.

From the simple notion of groups, advance has been made to the conception of a genuine "individuality of the blood," of importance in clinical medicine and criminology, and in the practical application of the knowledge of the heritability of individual properties in affiliation cases.

A large amount of material presented in the form of tables taken from the work of numerous workers in various parts of the world is regarded by the author as sufficient evidence in favor of the statements, first, that "the hereditary transmission of the blood group is an established fact"; second, "that this transmission takes place according to Mendel's law, and the iso-agglutinable properties A and B behave as Mendelian dominants"; and third, that "we may take it as definitely established that the transmission of the blood group is effected by means of two allelomorph characters, one being derived from the father and the other from the mother; the possible allelomorphs are three in number (multiple allelomorphs), their combination in pairs give rise to six genotypical blood groups." The author goes on to say that, since "practically all observers without exception are of the opinion that we have here a scientific theory resting on a much firmer foundation than many other so-called medical or biological 'facts' which are in everyday use in the law courts, and for this reason, quite apart from

the very great biological interest of this theory, its use in cases of contested paternity is fully justified."

There is a chapter on the Individuality of the Blood as an Ethno-Anthropological fact, the data so far collected showing that the distribution of the blood groups in a given population is related to its ethno-anthropological constitution, and that any statistical investigations on the blood groups must take into account the ethnological origin of the persons examined (which has not always been done). These racial differences alone, and not alterations in environment, or disease, can, in the present state of our knowledge, account for the variations in the frequency of the blood groups in man.

Chapter V deals with the Individuality of the Blood in its Clinical Applications, Transfusion, Incompatibility, Choice of Donor, etc.

The next chapter is devoted to the discussion of the Individuality of the Blood in Forensic Medicine, specifically the importance of the hereditary relationship between the blood groups of parents and children in forensic practice as evidenced in affiliation cases, the essential question being the discovery of the true father, the mother being already known. "The question is reversed if instead of forecasting the groups of the children of a given couple we have to forecast the group of the real father, the groups of the mother and the child being known. If the forecast is not verified in fact, we may conclude that the alleged father is not the true parent. It is quite easy to draw up two complimentary tables showing which groups the father can belong to, and which must be ruled out as impossible." Some indication of the value of all is given by the fact that in Berlin in 1924 there were 3000 paternity cases.

The second practical application of the blood-group theory is the investigation of the individual origin of a blood stain known to be due to human blood. In order to establish the "individual diagnosis" of a blood-stain, two different and independent courses are open: (1) to investigate the specific iso-agglutinating properties of the dried serum, or (2) to try to determine the elective absorbing properties of the corpuscles, *i. e.*, in other words, the specific iso-agglutinable substances.

The majority of theoretical investigations and of attempts to apply them practically we have used the former method, which is the older, and in which the technical questions admit of readier solution. Since, however, the agglutinable substance is far more resistant than the agglutinins to deleterious influences, the second method may often enable one to achieve his object when the first would leave him completely stranded. On account of "the extreme necessity and importance of medico-legal cases, it is really necessary to com-

bine both methods whenever this is possible."

In the practical utilization in forensic medicine of the results obtained by means of "individual diagnosis" the question generally is either, does the blood of a given stain (usually dry) come from a given individual? or are two stains due to the same blood? The procedure is outlined in the two cases. The reliability of the results depends entirely upon the way in which the tests are performed and the last chapter is devoted to a description of the technic of the individuality reactions.

The book closes with a bibliography of 2,375 titles, pages numbers, opposite those mentioned in the text, indicating where the quoted material from them is to be found. There is also a subject index.

Aside from the interest in the subject which all biologists have, the chief value of the work is to those whose expert opinion is sought in paternity cases and in the identification of blood stains. To such, the work would seem indispensable.

HENRY LAURENS, M. D.

Handbook of Experimental Pathology: By George Wagoner, M. D., and R. Philip Custer, M. D. Springfield and Baltimore, Charles C. Thomas, 1932. pp. 159, illus. por.

This volume is based on a course in experimental mammalian pathology given to second year students at the University of Pennsylvania. In the foreward Prof. Krumbhaar appropriately compares it to Sherrington's *Mammalian Physiology*. Some 120 exercises demonstrating the more important aspects of general and special pathology are preceded by a brief description of surgical technic, anesthesia, animal case and normal blood findings in laboratory animals. The general sections deals with Circulatory Disturbances, Degenerations, Infiltrations and Pigmentations, Inflammation, Regeneration and Repair, Infection and Immunity, and is concluded by a consideration of Experimental Tumors. The special section is essentially grouped on the basis of anatomical arrangement, but also includes a series of experiments involving Vitamin Deficiencies and one involving Hypersensitivity Reactions.

This book should be appreciatively received by instructors of pathology and should also be of distinct interest and usefulness to those in related fields, as in the reviewer's case to a pharmacologist. Some minor errors are noted. On page 14 "2 milligrams of morphine" per kilogram of body weight is given as an anesthetic dose, which is probably a misprint of "20 milligrams per kilogram." On page 15, "75 milligrams of avertin per kilogram" is given as an anesthetic dose for dogs, which is the usual ratio of dosage in clinical use but is about one-fifth the effective dosage with dogs.

R. P. WALTON, Ph. D.

Oral Spirochetes and Related Organisms in Fusospirochetal Disease: By David T. Smith, A. B., M. D. Baltimore, Williams & Wilkins. 1932. pp. 243.

In this work the author gives a very comprehensive description of the various spirochetal infections and his conclusions are conservative and in accordance with our knowledge of the subject. Among the conditions considered are Vincent's angina, trench mouth, Ludwig's angina, fuso-spirochetal infection of the eyes, ears, nose and sinuses, tongue, esophagus, meninges and brain, broncho-pulmonary spirochetosis and the relation of spirochetal disease to pulmonary abscess and gangrene. He also considers briefly fuso-spirochetal infections of the intestines, appendix, the genitalia and the skin. Each subject, where possible, is considered from the standpoints of history, bacteriology, experimental reproduction, pathology, symptoms, diagnosis and treatment.

As this is the first work of its kind in which all of our available information regarding this interesting infection has been collected under one cover, it should fulfill a useful and important mission in acquainting the profession with this condition. It is a work that can be recommended to the practicing physician as well as to the student and would also be useful to research workers. It contains an excellent bibliography, is well printed, illustrated and bound.

CHAS. F. CRAIG, M. D.

Cultivating the Child's Appetite: By Charles Anderson Aldrich, M. D. 2d ed. New York, The MacMillan Co. 1932. pp. 137. Price, \$1.25.

The second edition of this lucidly written book differs in only a minor degree from the first edition, with the exception of its final chapter on Developments in the Past Five Years. The causes, prevention, and treatment of the child who is a feeding problem are clearly defined. The nature, cultivation, and preservation of appetite are stressed. The book is full of practical suggestions, and is of value to physicians in obtaining a

thorough understanding of the problem of anorexia. They will find it useful to give to parents who may easily get from it helpful ideas of the modus operandi to be used to prevent and correct the increasingly numerous problems presented by children who refuse food.

H. B. ROTHSCHILD, M. D.

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PERSONAL CONTRIBUTION TO THE TREATMENT OF SOME FRACTURES AS THE RESULT OF LONG YEARS OF STUDY AND RESEARCH*

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NEW ORLEANS.

Most of us, especially in the beginning of our practice, are governed by the experience of older practitioners as recorded by them, either by word or in print. It requires a little courage to stray from the beaten path, and for this reason it was a long time before any progress was made in the treatment of fractures. Open reduction was seldom attempted even after the advent of roentgenograms, largely I believe, because there were so few who were mechanically inclined or gifted with any originality.

Although working in this field for years and departing in many ways from the teachings of older surgeons, the results of my work can be summarized in a few short pages. I shall not detain you with abstracts of the work of others, nor give you a detail of my failures, but rather relate the results of my researches and demonstrate as briefly as possible my successes.

My first work in this field was in the wards of the Charity Hospital from 1889-1891. The treatment of fractures in those days was crude and consisted almost entirely of the use of Buck's extension, seldom used effectively, and plaster of paris bandages. Compound fractures up to that time

were rarely treated, as amputation was the usual procedure.

In 1891 a youth, eighteen years of age, was admitted to our service in the Charity Hospital. He was suffering from a compound fracture of the femur, just above the condyle. His leg had been run over by a float. Aseptic surgery had just been introduced in the ward by Dr. Parham. The prescribed procedure in cleansing the wound and dressing it with sterile gauze was carried out and a temporary splint applied to relieve pain until the leg could be amputated, as infection usually followed with a high mortality (70 per cent). His condition was so good next day that I persuaded the house surgeon to turn the case over to Dr. Parham, who could amputate if necessary. Three months later the boy left the hospital with a perfectly sound leg, the first compound fracture on record leaving the institution with a good leg. This marked an epoch in the treatment of compound fractures, and with this came the necessity for devising means of handling these cases. This was done by the use of fenestrated tin splints and bracket splints, made of plaster, so that the wound could be exposed and dressed without manipulating the limb.

We now realized that there was a great field in the treatment of fractures and both of us devoted much time to this work. Few were the devices used. The Liston splint for femur fractures, as well as plaster bandages, usually gave functional results but with great deformity and much shortening. The Hodgen's splint which was popular-

*Read before the Orleans Parish Medical Society, April 25, 1932.

ized about that time by Dr. Mudd of St. Louis, was adopted by us and after learning how to adjust it, our results were far better in fractures of the long bones of the leg and the patients much more comfortable.

Another important observation was the fact that the cases which could be treated without immobilizing the joints were comfortable and their convalescence more rapid. The Hodgen's splint helped materially in fractures of the leg, as none of the joints were fully immobilized and traction prevented the overlapping of the fragments.

This was the beginning of traction treatment, which today has reached a point of great perfection in the Russell splint, which, however, is understood by few. Most surgeons were satisfied with a good functional result, deformity being the rule rather than the exception. The treatment through convalescence was far more painful than the injury itself.

KNEE

It was due to this condition, and especially in the knee joint, where ankylosis frequently followed fractures of the patella, that fractures recurred when first attempting to mobilize the joint. Several years were spent in working out a technic, with which many of you are familiar and which entirely prevented ankylosis, not only allowed the patient to get about on crutches in two weeks, but returned him to his occupation in six weeks, suffering no pain and discomfort during convalescence. This I consider a wonderful advance in the treatment of fractures of the patella. It was noticed that all fractures of the patella treated by simple suture left a deformity due to stretching of the fibers between the fragments, which affected the usefulness of the limb. In studying the knee joint from the skiagrams, it was seen that the patella rested on its center only, acting as a fulcrum, and the ends which are attached to the ligament and tendon, did not come in contact with the condyle. There was a reason for this: when the quadriceps pulled on the proximal end, it caused the distal end to tip

upward, starting the motion of the leg forward. It was evident, therefore, that the continuity of the patella must be preserved to make the joint function properly. The bony surfaces must be kept in apposition an indefinite period of time, six months at least, to secure osseous union (as the patella is a sessamoid bone and ossification slow) and at the same time the joint must be mobilized in order to prevent ankylosis. After many failures, success came by procuring a wire (annealed iron wire, No. 19) strong enough to hold the fragments for the required time, and so placed as to retain the bony surfaces in perfect and close apposition and allow free movement of the patella. No other method will do this and by such simple technic.

LONG SCREWS

It was about this time that surgeons began to use the open method for the treatment of fractures. Arbuthnot Lane was treating all of his cases, both compound and simple fractures, by the application of plates held by machine screws. In his hands the treatment was most successful but with his followers, and there were many, the results were often disastrous, as a plate improperly applied caused necrosis and the screws loosening from the bone, acted as foreign bodies. These could be applied by few, as their experience and training was not such as to guide them in adjusting the plates snugly and firmly to the bone. Once the screw became loose it was a menace and sooner or later would give rise to necrosis, osteomyelitis and superficial abscesses, necessitating the removal of the screws and plates and the operation was condemned and fell into disuse to a great extent. Realizing that if the cause could be removed it would be an advance in this branch of surgery, a means must be devised which would be fool-proof and at the same time accomplish the desired end. This was furnished by the introduction of long carpenter screws which are being pretty generally used today, allowing the shank to turn freely on the proximal side but being fixed in the distal side where they hold firmly and

only when the ends of a fracture can be held in perfect and firm apposition until ossification is assured, can success be attained. This was not the work of a day, the result speaks for itself.

PLATES AND BANDS

On one of his visits East, Dr. Parham conceived the idea of making a band to hold the bones of oblique fractures in position and at his suggestion, I delivered the Parham-Martin band, which in properly suited cases has given excellent results.

Another observation was to the effect that in exposing the shaft of the bone for the application of the bands and plates, cases in which little trauma was done, exposing only as much of the bone as was absolutely necessary to place the ends in apposition and to allow the application of the plate, infection rarely followed. Since replacing the short screw with the long, I have had to remove the plate but once and this was due to poor judgment in operating before an old infection had cleared up. This case, however, held the ends in apposition long enough to get the desired result and the patient was no worse for it.

HIP

Fractures of the neck of the femur seemed one of the greatest problems to be solved. Royal Whitman's technic which was just beginning to become popular gave the best results, but these results were expensive to the patient in point of discomfort, especially as few surgeons could apply a snug fitting cast. This fact, added to the suffering caused by our long summers, resulted in annoying complications. To succeed, the fractured surfaces must be kept in apposition. No method thus far accomplished the desired end without the use of plaster. Few surgeons seemed to have the courage to give it up. Bone pegs, nails and fixation devices were numerous. In my opinion, the Royal Whitman method was the best thus far suggested, but this was not only uncomfortable, but in nearly all cases there was absorption of the neck and the patient left with a limp and limited motion. Perhaps it was due to the pressure

on the head and neck which interfered with the circulation. Thoroughly convinced that when the fractured bones could be fixed and held in position without fixing the limb, circulation was less apt to be interfered with and atrophy of the muscles was less likely to occur. Introduction of one screw or nail through the trochanter helped hold the fragments in apposition and the plaster bandages kept it from slipping. This was in reality fixing the trochanter to or against the head. Would it not be better to fix the head to the trochanter? If this could be accomplished in such a way as to allow the head free movement in the acetabulum, and yet firmly attached to the trochanter, would it not be a distinct advance in the treatment of these troublesome cases, especially in the aged? I had already learned the value of carpenter screws. If they could be used in long bones by screwing them into the distal side of the bone, why not consider the head as the distal side? It worked. Many of you are familiar with this method. It has succeeded beyond my expectations.

PELVIS

For years it was thought fractures of the pelvis had to be treated in plaster casts, and still is by many. I reiterate that all that is necessary in the treatment of any fracture is fixation. The majority of these fractures are confined to the pubic bones and are never displaced beyond that point caused by the injury. Why then add to the distress of the patients by placing a restriction about their bodies? I found by actual experimentation in seven cases in the past four years, that these needed only rest in the prone position, but they could be made more comfortable by the application of a specially constructed belt and allowed to get on their feet in a very short period of time. Even complicated fractures of the pelvis could be treated by the same method and if deformity existed, such as fracture through the acetabulum, they could be corrected by the addition of traction. The surgeon who applies a plaster cast for the

treatment of fracture of the pelvis today, owes his patient an apology.

VERTEBRAE

Fractures of the vertebrae were locked as firmly as possible in a plaster jacket. The discomfort arising from this form of torture was almost as unbearable as the pain produced by the injury. Immobilization is the only essential. While doing laminectomies, I learned that the ligaments which held the vertebrae in position were tough and unyielding and could, I believe, be depended upon to hold all vertebral fractures in position, no matter what the cause. Especially is this true if the fracture is due to direct trauma, only severe enough to fracture the vertebrae, regardless of the character of the fracture. Rest in a prone position is all that is required. I had believed this for quite a while. Not until two years ago could I prove my contention. It was about this time that a blind man was struck by a street car. The eighth dorsal vertebra was fractured, without displacement. He refused to go to the hospital. It was no case for home treatment in a plaster jacket, as his wife was also blind, not like those who have eyes but cannot see, rather of the class who are blind but try to see. This man lay on his back four weeks, when he returned to his labors, free of pain and in better shape than any I had treated in a cast. His whole body was bathed daily and his back rubbed. I am glad to see some of our surgeons are now resorting to this method.

In bringing to your attention the results of my work, I am reminded of an expression used by Dr. Royal Whitman. He says, "A new treatment must be tested by novices and the results attained in inexperienced hands furnish the strongest evidence of its practicability and effectiveness." With few exceptions, the majority of these operations have been done by the younger surgeons and with the most satisfactory results. Uncomplicated fractures of the vertebral column, as well as those of the pelvis, in my opinion, can best be treated on a Bradford frame, with more comfort

to the patient, less atrophy of the muscles, shorter convalescence and as good, if not with better results.

My technic in the treatment of fractures of the patella is being quite extensively used, not only here but by others throughout the country and I feel certain when the results are compared with others in use, deserves at least a trial. Many working independently have arrived at the same conclusions, especially in treatment of fractures of the pelvis. It simply means that today the treatment of fractures has come into its own and is recognized as one of the most important branches of surgery. This is easily accounted for. We live in an age of industry, surrounded by every device capable of producing trauma of every description.

I have made no mention of the use of the many devices suggested for the treatment of fractures, nor have I said aught about bone pegs and bone plates. I was thoroughly familiar with every device and used many of them. None of them, however, hold the fragments firmly without the addition of splints, and when loose act as foreign bodies. It was on reports based on results of cases treated with such appliances that the open method was criticized so severely. Bone pegs have their place but are often used in the hope that though they loosen before union takes place, they will eventually be absorbed.

Gentlemen, I am as firm in my convictions regarding my results as was Lord Bacon when asked if a chicken could be preserved in snow. Like the good jurist that he was, he pled for time. At the end of some weeks he replied that it could. When asked how he knew, he answered that he had buried the chicken in the snow.

Every one of my experiments were tried, not once but many times; nor was the goal reached without failures, but each failure brought me nearer, even beyond my expectations, until today I feel justified in presenting them for your consideration.

In concluding, let me warn the inexperienced of the impossibility of learning to

treat fractures from text books, which pay too much attention to the anatomy and too little to treatment. Experience gained by personal contact is the only means of mastering the subject. Remember, you learn most by failures and authors are not given to publishing their mistakes.

SUMMARY

1. Introduction of long screws.
2. Use of annealed iron wire in treatment of fractures.
3. Operation for treatment of fracture of patella, preventing ankylosis of joint and shortening time of convalescence and preventing refracture.
4. Operation for fracture of neck of femur, doing away with any external fixation and restoring patients to normal condition in suitable cases, with shortened convalescence.
5. Introduction of band to be used in oblique fractures of long bones (known as Parham-Martin band).
6. Bandage for treatment of pelvic fractures.
7. Suggestion for treatment of spinal fractures without the use of plaster.

DISCUSSION

Dr. King: Dr. Martin's remarks about the work he has done represents a tremendous amount of effort, a tremendous amount of thought, a tremendous amount of patience. They also represent a peculiar type of mechanical skill which few of us possess. Having watched him work for a good many years, I am in position to know. He has been a pioneer with this type of work in New Orleans, and I believe that the profession in this city, state, and the South owes him a debt of gratitude which it will never be able to pay. I have often thought that a rose to the living is better than many wreaths to the dead, hence I fling a little bouquet where it belongs.

This work is not easy. When Lane first began his bone operations, he was afraid, because of the criticism that his early results were not entirely satisfactory. Lane was probably a pioneer in this particular kind of work. Murphy, of Chicago, did wonderful work along this line and a good many of you are following his precepts today. However, we have gotten away from one point on which Murphy laid particular stress—he laid down a law never to do a bone operation under from a week to 10 or 12 days. His reason was that after trauma a lacerated muscle is more liable

to infection in the first few days than it is after this period has elapsed. We know that the peritoneum will stand a certain amount of trauma, it will take care of itself in the presence of infection, whereas muscle will not. But we have learned this—if we follow out this thing that Murphy calls "superlative asepsis" we may go ahead and operate early in the game with the assurance that there will be no infection. We have never been able to do a knife and fork operation. It is impossible. You have got to get the fingers in the wound sometimes, but we find that, after you have finished, no matter how careful you have been, you should flood your field with ether. It helps in some way to prevent infection.

Murphy also laid down another law. In order to secure good bony union, you must have good bony contact. A moment ago, you saw a slide of a patella which had not been sutured or wired, it was held in the center by a little band of fiber. If you have ever opened a joint and observed the wound with its lacerated capsule, dipping down into the joint, you will readily understand why this peculiar condition occurs and why it is almost impossible to pull the fractured bones together with anything but some mechanical device. An old method was to use the figure of eight bandage; it is now out of date and rarely ever used. In fractures of the long bones, particularly fractures of the femur, the old Liston splint was used. Hodgins made an effort to get away from that sort of thing when he invented his splint; so did Braun when he invented his apparatus to keep the patient's leg off the bed.

We are constantly reaching out for better methods to get better results. Even today, with all of our up-to-date apparatus and methods, we do the best we can and yet sometimes we fail in obtaining absolutely perfect anatomic and functional results. It is always necessary to get perfect anatomic apposition of the bone, but the man who takes pride in his work will try for both good apposition and good functional result.

Do not go into this with the eyes shut. You must possess mechanical talent. We have all seen a man who, supposedly knew all about abdominal conditions, open the abdomen and get into trouble. The same is true in goiter—we all get into trouble. Any man who is going to take up this sort of work should prepare himself beforehand. I know a young man who decided to take up dentistry. The first thing he did was to find himself a job in a locksmith's shop in order to perfect his mechanical talent. This is good common horse sense. He knew if he tried to practice dentistry without knowing about the mechanical features he would be a failure. If some of our men today would find themselves jobs in shops, and improve their technique, their

results in this particular type of work would be far better than it is.

I personally wish to thank Dr. Martin for this explanation. I have been associated with him and know the trials and tribulations he has had. I have heard him cursed behind his back and criticized, but so far as I am able to notice, his results, his methods are as good as anybody else's. A little posy now and then where it belongs does no harm.

Dr. McIlhenny: I want to thank Dr. Martin for his demonstration. I have been associated with him for some 25 years and, having come in contact with his patients when one of us was sick or away on vacation, I have become accustomed to some of his peculiarities and understand him; but I have not yet become accustomed to the many surprises that he constantly shows in his mechanical ability. Dr. King stole some of my remarks when he said that Dr. Martin was remarkable in his mechanical ability, but he only phrased it in milder terms. I think he is something more than remarkable. He is constantly seeking for simpler methods to solve complicated problems.

I wish to confine my remarks to special fractures of the patella and of the neck of the femur. I think you can boil it down to a simplification of the combined methods plus the introduction of genius, as shown by Dr. Martin's use of the annealed iron wire. First, he realized that silver wire was not sufficient in strength to withstand the pull of the quadriceps tendon; as he stated, the union was only as strong as the material used in holding the bony fragments in apposition. Then, seeking for a simpler method, he found a simple wire which would hold adequately and not produce trouble. He finally developed a method of holding the bone in apposition and by the function of the quadriceps the bones would hold in further apposition. The great point, to my mind, is not the suture of the patella with annealed iron wire—it is the simplicity with which the method can be used.

And a further and a greater point is the duration of time. It is only necessary for partial immobilization of the limb and, as Dr. Martin stated, the patients may be discharged from the hospital and function allowed as soon as the wound has healed. He has shown here from time to time, numerous cases one a brother physician who was operated on, not by Dr. Martin but by another surgeon in New Orleans. He was able, only about six months after his extensive fracture of the patella to show us one of the most beautiful demonstrations I have ever seen in proving that this simple method is the most applicable and common sense one that can be used.

With regard to fractures of the hip, Dr. Mar-

tin has dwelt on the point of drawing the smaller fragments down to the larger. I do not know that that point is realized and appreciated—the fact that you can draw the smaller fragment to the larger fragment instead of trying to force the larger fragment up is a very decided mechanical point.

As Dr. Martin has demonstrated, this method can be done under a local, it can be used in the aged, it does require very possibly a most minute mechanical sense, but it is done in a short time and through a comparatively short incision, it will allow the patient to be up in 24 hours, it will allow him to move around in bed without the necessity of support (in spite of the fact that some of us do like to use plaster of Paris), it obviates the necessity of maintenance in bed for any length of time, and lessens the danger of complications. I think this method is applicable in a great many cases of fractures of the neck of the femur.

A student asked me which was the best method of treating fractures. I told him I did not know of any best method, but that in my experience the simplest method, no matter what the fracture, depending on where the fracture is, is the best. Dr. Martin, in summing up his work, demonstrates beyond the shadow of a doubt that he is for the simpler methods of treating fractures.

Dr. Fenner: I am a classmate of Dr. Martin's, as an interne at the Charity Hospital, I had the privilege of serving as an interne in Dr. Parham's wards the first year. Dr. Martin he was my senior by one year, and I served as his assistant. I had the privilege of witnessing the desperate struggle Dr. Parham had to introduce aseptic surgery and of seeing his triumph.

The paper Dr. Martin has read to us is an extremely interesting one. I do believe that in fractures of the patella it can be truly said that the best method of treatment is the method of using the annealed wire loop, which has been devised by Dr. Martin. I have no doubt in my mind that no other suture method compares with it in meeting the mechanical problem, in releasing the patient far sooner than any other method, and in giving really permanent and solid union. How many of you noticed the practical, sound, common-sense remark Dr. Martin made about the incision across the knee? Just consult your textbooks on the surgery of the bones and joints and on operative surgery of the knee and try and find any author who recommends the transverse incision across the middle of the patella. Everyone advises a U incision, but all you have to do is what Dr. Martin suggested—draw a pencil mark across your knee following the U incision and see what you kneel on. Make the incision he rec-

ommends, and it will be entirely out of the line of pressure.

In fractures of the hip, for the last 10 years it has been my misfortune to have a roomfull of old, decrepit women with fractures of the neck of the femur. I will admit my results are still just about as discouraging to me as any work I have ever done in my life. It is not because I am a damned fool, not because I have not the experience, not because I do not give them the best care I know how to give. I have tried every method of treatment that has been recommended. I confess that none of them have given thoroughly satisfactory results with the exception of some cases treated by Whitman's method in which I had young, fairly vigorous and tolerably phlegmatic subjects, and in those I have obtained good functional results, as good as in the two whom Dr. Martin exhibited here tonight on whom he had used his screw fixation. But Dr. Martin has a mechanical efficiency which I have not. I got those screws in just as perfectly in alignment as he does, in some of my cases. Every now and then I would have a roentgenogram made and find that one of the screws had passed outside of the neck of the femur. Another will have run up and jammed the acetabulum and then I will have to take the screws out. Some did what one of his films showed. I thought I had the screws set fine and tight but a film made two days afterwards showed that the head of the screw was sticking out half an inch.

This method of fixation is applicable in cases that just do not do by any of the ordinary methods. I had the privilege of introducing the Hamilton-Russell method of compound traction in treatment of fractures of the femur at any level at Charity Hospital, after reading Hamilton-Russell's articles, and it has been adopted in all fracture wards. It does nicely in a great many cases. It is certainly far more comfortable on patients than a good many other methods, but it does not work on fractures of the neck of the femur. Whitman's abduction method of jamming the broken bone surfaces together and getting good apposition does splendidly. An attendant in the genito-urinary examination rooms suffered a typical fracture of the neck of the femur, and was treated with the Whitman abduction method, and nobody could tell she has had a broken hip. A great many cases like that, on which a weight and pulley have been put, are left lame for life.

I have put a good many screws in broken femurs. I put them in one patient who got along beautifully, who had no pain and was wonderfully comfortable during her convalescence. After her discharge, she had been walking around for six months, when she fell down and broke the

screws. Then I tried to take the screws out and remove the head of the femur, but she had been well for six months and walked fine. One or two others have been restored for useful lives by the use of screws. Others we have kept in bed for three months, they have got up, the screws have held and the trochanters have healed up, but the patient is lamed for life.

Every now and then we get a case such as I have had today. A frail old woman of 90 years fell down and broke her hip. I knew if I put her in the Whitman abduction plaster she would be dead in two weeks. If I put her in Hamilton-Russell traction, she would develop pneumonia. Under local anesthesia, I introduced a couple of long wood screws according to Dr. Martin's method. I did not put anything on her, but put her back in bed. She has not a perfect hip, but she is lying there comfortably and is not suffering any pain. Except for the treatment that Dr. Martin has devised, we would not have been able to do this for her.

These methods which Dr. Martin has proposed to you are practical. They are comparatively simple. They are based on sound thought, and even if we are not able to do these procedures as well as Dr. Martin, we have reason to be grateful to him for showing us that this kind of thought produces sound, practical results. I personally am grateful to have heard his paper and to have had the privilege of living alongside of him and of seeing the splendid work he has produced out of his capacity to really think.

Dr. Martin (closing): I regret that you did not discuss the treatment of fractures more in detail. However, I am grateful for your interest and especially for your encouraging remarks regarding my efforts.

Dr. Fenner has the happy faculty of filling in the gaps and emphasizing defects.

Of the two cases presented tonight, one was treated by me, one by a younger member of the profession; these as you saw gave excellent results, showing that strict adherence to the technic is all that is required, experience is a great help but not necessary. The method is not one applicable to every case, there are many conditions to be considered. In suitable cases, that is, those in which the fractured surfaces can be apposed, failure is rare. In one case, that of a woman 82 years of age, an attempt was made to use screws, but the bone was so fragile that the screws would not hold; this was an oblique fracture through the trochanter, running from the lesser trochanter upwards. Annealed iron wire No. 18 was applied with excellent results.

Fourteen cases ranging from 70 to 84 years of age were treated with local analgesia. These could not be treated by traction as adhesive plas-

ter either did not hold or infection of the skin resulted. There was no difficulty in introducing the screws in these and all the patients were made comfortable the balance of their lives. Though bony union is not expected in these cases, one case reported by Dr. Faust, aged 79, was successful. A case of Dr. King had no trouble for four years, although she fell on her hip several times, later developing a slight limp. A check-up showed a softening of the head with absorption but the site of fracture was united and in excellent position. Never do this operation unless in a hospital where a check-up with the roentgen ray can be made. Every precaution should be taken to prevent infection; so far not a single case has been reported.

You can place absolute confidence in the long wood (carpenter) screws. In one of our cases a plate was applied at the base of the trochanter, after the woman's death two weeks later a check-up was made and it was found that though the plate had broken, the four screws were holding the upper and lower halves in perfect position. The plate was broken in moving the body from the morgue to the roentgen ray department.

My first patella operation was done with silver wire thirty-two years ago. The wire held sufficiently long to secure bony union, but for some reason broke and the result was discouraging. The discovery of annealed iron wire filled a long felt want and after the introduction into this work of the annealed wire (No. 18) the results were all that could be desired. The patella is a sessamoid bone and union is slow, requiring from four to six months and the material used must therefore be permanent or at least of six months duration, no absorbable material will last this long and no strain can be put upon it for this length of time. The great number of cases reported show conclusively that wire when properly applied is not in any way objectionable, some of these cases having been operated upon as much as thirty years ago, and in no instance has it had to be removed. I do not believe that bony union can be shown in any case in which absorbable sutures are used, I have never seen one, although the results are apparently perfect.

I want to thank my friends for their cooperation in this work. I believe I have made a sufficient number of converts to assure its continuance and success. I thank you sincerely for your kind reception of my years of effort. It has been more than forty years since I first came before you with this subject and as it may be my last appearance, I am happy in the thought that I am able to present for your consideration something worthwhile.

ALLERGY*

EDLEY H. JONES, M. D.

VICKSBURG, MISS.

A chairman's address should present some original work, discuss some subject in the manner of one presenting the last word, or serve as a review or an editorial. Not having done the first and feeling incapable of the second, this address will be a brief editorial dedicated to the subject of allergy as it affects our profession, our specialty and our patients.

A few years ago workers in allergic fields had not even agreed on terminology. Allergy, atrophy, hypersensitiveness; anaphylaxis, idiosyncrasy, etc., were all used interchangeably but in late years Von Pirquet's definition of allergy appears to have been accepted. Even now the limitations of the field may not be known. Few medical schools recognize it to the extent of including it in their curricula. Yet allergic conditions and influences have been found in practically every medical and surgical field and particularly in ours.

Hay fever, seasonal and perennial, and pollen asthma are easily understood and can usually be quickly diagnosed and benefited by treatment. But when ingestion of certain foods by sensitive individuals give rise to a great variety of symptoms ranging from mild skin conditions through vasomotor rhinitis, asthma, excessive urination, and migraine to acute enteritis simulating acute appendicitis, it is apparent that allergy is a field of great importance.

Early statistics estimated that 4 per cent of our population had allergic symptoms. Later statistics estimate 7 per cent and some allergists now estimate 10 per cent. Other statistics state that approximately 80 per cent of all allergic subjects have a positive family history.

*Chairman's Address, read before the Section on Eye, Ear, Nose and Throat at the Sixty-fifth Annual Session of the Mississippi State Medical Association, Jackson, April 13, 1932.

With improved methods of diagnosis and more earnest consideration, the percentage of reported cases would naturally increase but these statistics relating to positive family history indicate that the allergic field may increase; in other words, as our population progresses and increases, our percentage of allergic patients will increase.

With such a new specialty it is only natural that enthusiasts may over-emphasize allergy and a word of conservatism may be in order. It is definitely known that some cases of urticaria are allergic; yet it is estimated that only about 10 per cent respond to allergic methods of diagnosis and treatment and to attempt to treat all cases of urticaria in this manner would be quite disappointing. We must not be extremists either in conservatism or enthusiasm. We should "stay in the middle of the road" and evaluate allergy properly.

It is particularly difficult to understand asthma, migraine, etc., arising from sensitivity to certain foods. Recent work indicates that the specific allergen is not always the protein molecule, but it appears that only foods containing proteins induce symptoms. We are taught that all proteins, in the course of digestion, are broken down into peptones before absorption. These peptones are considered more or less identical, but we know that certain foods cause definite symptoms in certain individuals. From the practical viewpoint, the mechanism of reaction is not as important as the end result.

It is thought by some that abnormalities of the endocrine system may throw some light on the subject. The efficiency of adrenalin in relieving asthma would certainly add support to such a theory. Splenic extract has been used in certain skin conditions with varying degrees of success. It may be in the future that this theory may be proven correct; yet it will be hard to explain how endocrine dysfunction causes an individual to be sensitive to one food and not to a similar one.

Even though the literature on this subject is already becoming voluminous, it is

difficult to find reliable statistics regarding relief in allergic conditions other than hay fever and asthma. Our patients have a right to know what percentage are relieved by this form of treatment. If we turn to allergy as a "cure-all" we shall surely be disappointed. Because one case of migraine is relieved by allergic methods is no justification to advise all migraine cases to have diagnostic tests unless they fully realize the chances of success and are willing to try it. Otherwise, we will have so many disappointments that allergy will fall into disrepute.

We, in our specialty, must pay particular attention to allergy. A large percentage of allergic patients will consult us first. We will see those cases suffering with vernal or allergic conjunctivitis, seasonal and perennial hay fever and vasomotor rhinitis; we will also see many who are suffering from headaches due to allergic causes. It, therefore, behooves us to study the subject carefully. It may appear to some that if we give sufficient consideration to our own specialty, we will not have time to study allergy; as a matter of fact we are not giving proper consideration to our work unless we do consider allergy, as it affects our patients. One has only to note the improvement in the sinuses following proper treatment of one case of perennial hay fever or to note the enormous reaction, and perhaps disastrous results, following surgery on an active case of seasonal hay fever to appreciate this fact.

In conclusion, I would like to emphasize the following points: Allergy, while little recognized, is a very important field. Allergic cases are not uncommon and their percentage may increase. Allergic influences are very definitely felt in our field, particularly in rhinology. It is quite important that we familiarize ourselves sufficiently with allergic conditions to be able to make proper diagnoses. Further, I would suggest to the future chairmen of our section that at least one paper relating to allergy be included on the program each year.

ALLERGIC ASTHMA.*

JAMES CARY PEGUES, M. D.

GREENVILLE, MISS.

Allergy plays a very important part in bronchial asthma. Sir William Osler was an allergist. He wrote that asthma was anaphylactic in nature, differing from hay fever only in its location and extent of reaction.

No one has ever been able to explain the inner workings of allergic phenomena entirely to our satisfaction and for this reason some of us are skeptical, feeling subconsciously perhaps that the fundamental cause has not been found. And yet the allergic method is producing results. It also appears to be about as fundamental as the use of mosquito control for the prevention of malaria.

Bronchial asthma is produced for the most part by foods, pollens and animal emanations, and is only produced when the patient comes in contact with certain of them that are poisonous to him. Keep the harmful substance away and he has no asthma. What could be more fundamental than that?

Where a lot of us have made mistakes has been in making a few quick tests and depending upon the results to tell us the offending causes. Pope must have been thinking of something like this when he wrote "A little learning is a dangerous thing, drink deep or touch not the Pierian Spring." To be scientific we should test for every probable irritant in the patient's environment, or until we are sure we have found the cause of his trouble, and we should only be made sure by our results.

Group testing is disappointing, a group test being a mixture of everything in the family group, contains very minute amounts of each one, whereas in the individual test as much of each substance is used as would be of the whole batch in

group testing. Often it is the weakly positive substance that may give the clue to the cause. For example, I had a patient that reacted very slightly to lobsters but not to oysters when I tested him. As the two are closely related the patient was advised not to eat either of them. A week or two later he ate some oysters and had an attack that night. If that patient had only been group tested, and no attention paid to mild reaction, the cause of his attack would probably not have been explained.

Balyeat says he obtains allergic reactions in 90 per cent of his cases and he is striving to make it 100 per cent. Rowe claims about 50 per cent is all one can depend upon.

Some of the reasons for negative or very slight reactions may be the use of antispasmodics the day and night before. I recall one case that had been on ephedrin capsules for several days before I tested her. Not a single reaction showed up. Yet her history was positive for allergy and she had previously been tested elsewhere with quite a number of good reactions, and I thought to myself that my testing material had gone bad. Finally she told me that she had been taking so many little pink capsules that she was quite nervous, and then I knew why there were no reactions. Adrenalin will also affect the test, so will belladonna, morphine, nitrates, amytal, and sometimes aspirin and whiskey. Patients greatly debilitated, emaciated or anemic are more difficult for the test, and if a patient faints during the test the reactions, if any, are abolished. This is accounted for in part by the reflex compensatory constrictions of the peripheral vessels.

Not enough attention is given to the pre-testing period. As a rule when a patient makes up his mind to have the tests made he wants them made as soon as possible. He would consent to go to the hospital the night before an operation, and to have the operative field shaved, his diet regulated, his bowels cleaned out. The surgeon has

*Read before the Section on Eye, Ear, Nose and Throat, at the Sixty-fifth Annual Session of the Mississippi State Medical Association, Jackson, April 12, 1932.

found out that such a procedure is worth while and he insists upon it. But the poor asthmatic is rushed through as soon as he comes in and he may have taken two or three hypos of adrenalin before he comes, in order to get through the ordeal without an attack.

Rowe says the best time to obtain good reactions is just before or during an attack. He might have said that the worst time for such a test is right after a big shot of something to prevent an attack.

I have produced attacks in two of my cases during the course of the test, and the reactions were the best I have been able to obtain; the results likewise were 100 per cent relief.

Perhaps part of the ideal pre-testing treatment would be to have the patient spend 48 hours in the hospital in an air filtered room on a non-allergic diet. This would enable the patient to obtain relief without resorting to antispasmodics and yet afford time for the elimination of drugs that might render the tests negative. Twice each day the area to be used for the test should be steamed and massaged in order to stimulate the circulation but not to the point of making the skin tender. Weak patients should be built up first and tested afterward.

In making the tests it is well to use both the scratch and the intradermal method. In the former small skin scratches about $\frac{1}{2}$ inch long are made not deep enough to cause blood to flow but probably a little deeper than the ordinary vaccination scratch. The upper part of the back or arm is usually used. In the intradermal method the hypodermic needle and syringe are used and the substances injected between the two layers of skin. This is considered by some to be a more delicate and more reliable test than the scratch test.

The reactions may begin to show up immediately and some may appear several hours later, and some may be delayed until the next morning.

A careful history often elicits an idio-

syncrasy for certain foods and substances and these should be kept in mind in making up a diet and routine. Occupation must not be neglected in considering possibilities. For example, a wholesale groceryman developed asthma recently, and he only had it when he went into the warehouse where flour was being loaded or unloaded. His test showed four-plus to wheat and very little of anything else. As long as he stays away from flour he is entirely free of his trouble.

The best results are obtained in young people. The cases that start before five are said to be more resistant than those that start a few years later. I believe that part of this may be due to the difficulty in finding the cause. Skin tests in small children are not easy to make and it is very natural to omit a great many of the substances generally used in the asthmatic test.

The older people, fifty and beyond, usually have relaxed skins that fail to respond to the skin test as actively as do younger patients. This fact was not appreciated for a long time. Much valuable knowledge may be gained from even mild reactions in the aged. Bronchitis and weakened hearts are much more common in older asthmatics, and these concomitant conditions have not been given the proper attention in the past.

The longer the patient has had the disease the more difficult it is to eradicate. In this respect I believe it is no different from other chronic diseases. This difficulty may in part be explained by the presence of other diseases that complicate the picture, in part by the unusually large number of substances to which such a patient is as a rule sensitive. And the patient cannot always be removed from all of his positive allergins. A person long afflicted with any disease that reacts in such a spasmodic manner has established deep seated habit reflexes that are easily set in action. These are hard to break.

Diagnosis: True asthma in children is frequently unrecognized because it may appear in the form of a peculiar kind of croup,

attacks of bronchitis or an apparent broncho-pneumonia that gets well over night. The child may have constant spells of wet nose, or the habit of licking his lips, and these should make one suspicious of a specific sensitivity to some protein as a cause. After the asthma has been well established the diagnosis is easy.

The primary factors in children may be pollens, animal emanations, food or a combination. Balyeat says, "The secondary factors play such a vital part that success or failure may depend entirely upon the attention given to them." He classes food as a secondary factor in adults but says it becomes less and less a factor as maturity is approached. All authorities are agreed that every factor is vitally important.

In adults the pollens such as elm, maple, cottonwood, oak, cedar, bermuda, timothy, Johnson grass, amaranths and ragweed, and the foods are factors. So also are the animal emanations. There are so many of these factors that it is futile to attempt to guess which ones are causing the patient's asthma. In addition one must not forget that there is such a thing as bacterial allergy. Some authorities would call bacterial sensitivity a secondary factor. Brown makes tests for each of the common forms of bacteria and if a reaction is obtained he prepares a specific vaccine. He feels that bacteria are primary factors in some cases and probably a secondary cause in others. Rowe and Balyeat on the other hand have found no advantage to be derived from specific tests for bacteria. They say a stock vaccine is as good as a specific vaccine in their cases and they do not lay much stress upon the bacterial cause, probably feeling like a number of authorities do about the "cold shots" that the results more often prove disappointing. Vaccines have not been of much help in our cases.

TREATMENT

Some cases are so simple that the mere removal of some pet from the patient's environment gives him complete relief. Some are more complex and require pollen treat-

ment and staying away from dust and high winds. And some are so compound complex that it is almost impossible to cure them.

The prevention of any disease is always preferable to the treatment, and it seems to me that this phase of asthma has not been sufficiently emphasized.

The figures from most asthma clinics show that heredity plays an important part as a factor in its cause. From sixty to seventy per cent of cases on record give a family history of allergy. From sixty to seventy per cent of hay fever cases develop asthma. If then a patient is seen to have a family history of asthma or hay fever and he gives a history of frequent sneezing spells or itching of the nose and throat and perhaps spells of difficult breathing, asthma must be thought of as likely to follow. All hay fever cases should be forewarned of the asthmatic possibilities if left untreated.

The nose and throat men see "pre-hay fever" and "pre-asthmatic" noses almost daily. The mucous membrane is paler than normal with a slight bluish tinge, and sometimes there is an itching complained of, and sometimes a watery discharge. If there is a family history of some allergic disease like asthma or hay fever such a nose is almost surely an allergic one with the possibility of asthma or hay fever developing at an early date. In all such cases allergy should be thought of.

Another important factor about asthma is to treat the patient as soon as it is known that he has asthma. It has been shown that the shorter the duration of the disease the easier and more complete the cure. When the patient has had the disease a long time the chest is usually deformed, bronchiectasis produced, and there is often an old chronic bronchitis present. Obviously these conditions must be treated. Sometimes a source of irritation may be retention of products in the dilated alveoli.

The habit reflex may have become so deeply rooted as to require hospital treatment where the daily routine may be con-

trolled. And the most recent advances would require the hospital room to have air filters to keep out the pollens and a humidifier to regulate the moisture content. The old stubborn cases may have to be kept in the hospital until their general health has been built up.

All pollen cases should be treated with pollen antigen beginning at least two months before the season for their particular pollen. If the case is one of animal emanations these should be completely removed from the patient's environment and whatever foods are definitely positive should be left out of the diet.

It is possible also that artificially produced fever which is being tried in some clinics may be able to help in a material way when a safe and satisfactory method of regulation has been worked out.

Elimination diets are worth trying when other measures fail. The general health and strength of the patient should be built up as much as possible. Like other diseases asthma is more readily prevented when the patient has a good resistance.

But patience and persistence in working out the individual case from an allergic standpoint will produce satisfactory results in most cases, and the asthmatic should no longer be denied such help.

DISCUSSION

Dr. A. H. Little, Oxford: In treating asthmatics whose symptoms are produced by pollen I would like to mention the perennial or continuous method of treatment. This method is neither new nor one that has not been thoroughly tried out. It was described as early as 1927 by Aaron Brown, and since then it has been both described and its results reported by Figley, Brown, Vaughan, Unger and others.

Briefly, the continuous or perennial type of treatment is the administration of the protective dose of pollen extract at weekly, bi-weekly or monthly intervals throughout the year for a period of several years. The treatment is begun at any time during the year by the usual pre-seasonal method and the dose of pollen extract gradually increased at intervals of three to seven days until the tolerance dose is reached. After this time the maximum protective dose is continued as stated. The advantages of the perennial type of treatment are as follows:

1. The treatment may be started at any time during the year.

2. The patient's visits to the office for treatment are greatly reduced in number.

3. Treatment is less likely to be interrupted by illness, vacations or other causes.

4. Much better results are obtained by this method. The percentage of those completely relieved is greater as the immunity is never lost by discontinuing treatment between seasons, but is retained by the repetition of the maximum protective dose.

The acid base balance of the body with relation to the treatment of allergic individuals has recently been reported by Beckman and others. It is a well known fact that many allergic people are either greatly or completely relieved of their symptoms after acute illnesses. This is explained by assuming that the body prior to the illness possessed a potential alkalosis and that during the illness this was overcome and the acid-base balance thrown more on the acid side. With this idea in mind, treatment with dilute mineral acids and diets that produce acid ash has been given with encouraging results.

Dr. J. P. Henry, Memphis, Tennessee: As Dr. Pegues has said, some of the fundamental principles of allergy have not yet been satisfactorily explained. We have certain theories, however, and treatment, based on these theories, gets results. Each year advances are being made in this particular field of work and those of us who are particularly interested in this subject believe that we now have some definite facts in regard to allergy. As briefly as possible I would like to enumerate some of them.

1. Heredity. As a rule, among the first questions a patient will ask is, "Why do I have hay fever or asthma?" The most logical answer to this question is that the patient has inherited the ability to become sensitive to substances which are harmless to normal individuals. As stated in a paper which I read before this association last year, we found that in dealing with children below the age of 17, 91.06 per cent gave a history of some allergic condition among their antecedents (parents, uncles, aunts, grandparents or great-grandparents). Among adults between the ages of 20 to 40 we found a positive family history in 70.5 per cent and in those from 40 to 60 only 56.2 per cent gave positive family histories. These differences are easily accounted for by the fact that among children the family history is well known, whereas among adults, particularly those past 40, it is difficult to obtain accurate information concerning allergic diseases among the ancestors. I see in the audience this afternoon five physicians who have asthma or some other allergic manifestation and all of them

have children with some form of allergy.

The second point which I would like to mention is the fact that:

(a) Various types of allergy are interchangeable in the same or different generations. For example, a grandparent may have asthma, the parent urticaria and the child abdominal allergy, migraine or hay fever.

(b) All members of one generation may escape but are capable of transmitting the tendency.

(c) Symptoms appear earlier when allergy is present on both sides of the family.

(d) Transmission occurs in about equal proportions through mother and father.

The subject of heredity is of great importance when attempting to make a differential diagnosis between a typical hay fever and non-allergic sinus disease or the diagnosis of certain vague abdominal disturbances, various dermatoses and other borderline cases that are not absolutely typical.

Another question that seems to puzzle is "the age of onset." Laymen do not understand why they were free of symptoms for twenty-five or thirty years and then suddenly manifested some form of allergy. This seems to depend upon the degree to become sensitive which they have inherited. In other words, some children become sensitive before birth to substances in the mother's blood. This must be so because we frequently see children who have severe hay fever, asthma and urticaria the very first time egg yolk is added to the diet. Others develop eczema or asthma at the age of eighteen months meaning that it has taken this length of time for them to become clinically sensitive. Others develop hay fever or asthma due to certain pollens at the age of twenty, thirty, forty or fifty on account of the fact that it has required this number of years to develop the sensitization, indicating that their inherited ability to become sensitive was not as great as that of the infant who manifested symptoms upon first contact after birth.

The third point of interest is the fact that any portion of the body may become involved; the respiratory and gastro-intestinal tracts and the skin are perhaps most commonly affected. However, the brain, joints, and genito-urinary tract do not escape.

I would like to emphasize what Dr. Pegues has said about the importance of thorough testing. An asthmatic should be tested by the scratch method with all of the principal pollens which are common to the territory in which he lives, all the animal epidermas and miscellaneous products which are available at the present time, approximately 150 foods, respiratory vaccines, and any other product that seems indicated by the history. Frequently all scratch tests are negative, particularly in dealing with asthmatics, and therefore

it is most important that these be followed by intradermals. I am often asked why we use scratch tests at all in view of the above statement but the scratch tests are as important as the intradermals in that intradermal testing is not entirely safe unless preceded by negative scratch tests. If the patient gives a satisfactory reaction by the scratch method to a certain product, then an intradermal for that particular substance is not made since we have obtained the information desired.

One of the biggest problems with which we have to cope is the correct interpretation and correlation of positive reactions with the history and our ability to do this determines whether or not treatment is to be successful. Probably the most difficult reactions to interpret are those obtained from foods on account of the fact that positive reactions to foods may represent past, present or future history. We often see patients who have had urticaria in the past due to a food such as celery. At the present celery can be eaten without symptoms; yet the skin reaction remains positive. We have also seen hay fever sufferers who were cured clinically but continued to show positive reactions. This emphasizes what I said a moment ago, that correlation of findings and the history must be carefully done.

Getting back to the question of foods, we are never justified in telling a patient that a certain food must never be taken again. All reacting foods should be taken out of the diet but with the distinct understanding that it is for a trial period only. Any food desired, including those that reacted, is added to the diet later but only one food at a time and that food is used five or six days before another is added. Finally, only those foods which can be proved of clinical importance are eliminated, either permanently or until such time that the patient finds small amounts can be taken without harm. This happens in certain cases after a period of abstinence.

In regard to specific treatment, the problem resolves itself into having the patient eliminate or avoid all substances which can be dealt with in this manner such as foods, animal pets, feathers, and certain miscellaneous products. For all allergens which cannot be avoided, such as wind-borne pollens, orris root, certain occupational dusts, and others, desensitization is necessary.

I have been invited here as a guest of the Ear, Nose and Throat Section and perhaps many will not agree with what I am about to say about the management of the sinuses which are involved to some degree in nearly all hay fever or asthma sufferers. In former years when we saw a patient with asthma, scratch tests would be made and, as stated above, these were usually negative. At that time we were not doing complete and

routine tests, neither were we using the intradermal tests because we did not know that this method would bring out positive reactions which were negative by the scratch method. Having found nothing to account for the asthmatic attacks, we would then advise an operation on one or more sinuses and employ autogenous vaccines taken from these cavities. This method of treatment was most unsatisfactory.

Later on, after going into the matter of allergy more thoroughly and employing the present day methods of testing, we found numerous positive reactions in practically all cases, particularly among children. It then occurred to us that the involvement of the sinus mucous membranes was due to the same allergens which produced the bronchial congestion and it seemed reasonable that the sinuses should respond just as the bronchial mucous membranes did when the offending allergens were removed or desensitization occurred.

During the past five years I think we have been able to prove that this supposition was correct and it is now our custom to do nothing in regard to the sinuses, regardless of how cloudy the x-ray films may be, in the absence of symptoms of sinusitis such as pus, localized pain and temperature. Hundreds of these patients have been free of symptoms over a period of years. For example, here is an x-ray film of the chest showing marked density of the hila shadows and small consolidations in the right lower lobe resembling bronchiectasis in a girl thirteen years of age. She had had asthma for ten years. The roentgenograms of her sinuses show the ethmoids and antra cloudy three plus. This girl was sensitive to a few foods, feathers, certain animal epidermals and pollens. Upon removal of the allergens first mentioned and desensitization with pollens, she has not had an asthmatic attack for the past four years. Here is a picture of her chest taken fourteen months after the original examination which is normal in appearance and here is a film of the sinuses that were so cloudy and as you can see, the cloudiness in the ethmoids and antra has entirely disappeared.

In closing, I would like for it to be clearly understood that I am speaking only of allergic patients with secondary, non-suppurative allergic sinus involvement. Non-allergic sinusitis with infection, allergic sinusitis with superimposed secondary infection, or polyps should be taken care of promptly by institution of drainage or any other measure that the otolaryngologist deems best. We do think, however, that allergic individuals make better progress if they can be spared radical operative procedures.

Dr. James C. Pegues (closing): I want to thank the doctors for their discussion. Naturally, in a

few minutes one could not take up every phase of the subject, but I tried to cover it from a general standpoint.

When you see a patient with an attack of asthma, the first thing to do is to relieve the patient immediately. Morphine should not be resorted to if anything else will give results. Ephedrin or adrenalin is best to give. It is well to put the patient on ephedrin capsules, and have him take some of them home in case an attack comes on. Lots of times it will prevent an attack. For the old chronic cases, especially if they are far from a doctor, I think it is well to teach some member of the family to give a hypodermic dose, so the patient will not have to suffer two or three hours before the doctor can see him. Even with that, you will have chronic cases where adrenalin, morphine, and everything else you try will not do any good. I find in some of these cases that a good dose of calomel will help them more than anything else. Give them a thorough purge, followed by a light laxative. It is often very beneficial.

I purposely omitted any mention of the sinuses because that is a much debated subject. The nose and throat men cite cases indicating the sinuses as the cause, but I think it is well in these cases to keep our feet on the ground, and if we have bad sinuses, treat them along with the allergic phase.

ALLERGIC REACTION BY REMOTE CONTROL*

NARCISSE F. THIBERGE, M. D.

NEW ORLEANS.

The reappearance of an allergic manifestation at a distal point, has been occasionally observed by most of us. From some, it has received only a passing notice, being classed as a curious phenomenon of no consequence; others have considered it of theoretical value and subject to various explanations; in this instance, the reaction has been utilized as a means of treatment and as a guide for a suitable maintenance. It is pretty generally admitted that the immunity process has its principal seat, if not the only seat, in the individual tissue cells. Whether the reaction is an expression of the combat between the antibody and the antigen, or whether destructive inflamma-

*Read before the Orleans Parish Medical Society, May 23, 1932.

tion or the irritation does not come then, but later when the immune body develops, is still a matter of debate.

In the case cited, we attribute the good result to the detachment of the immune substance formed by the junction of antibody with antigen and its redistribution into the general body fluids. Here is a short history of the case:

Mrs. M. J., white, twenty-three years of age, with a marked allergic family history, was tested by the writer 2 years ago. Allergy first manifested itself in spring 1927, two years after the birth of her son. She had severe albuminuria at the time which cleared up soon after. The following year, the attack developed one month earlier and continued till fall. On testing her, her allergy to cereals and grass was marked. Last fall, she was retested. Under treatment her allergy for grass and cereals had then become negligible, that for ragweed was quite active and it was then that she presented the peculiar re-awakening of the reaction site each time she had mild hay fever or a large dose of extract was administered.

While taking the extract this spring, the patient herself first noticed the unusual phenomenon: every morning when she experienced mild hay fever the reaction in the tested site of last fall would reawaken; after 10 A. M., both hay fever and reaction disappeared till next day.

She was directed in lieu of hypodermic medication, to massage the recurring reaction for from 3 to 5 minutes every morning. If the massage was continued longer, symptoms of mild anaphylaxis appeared. The swelling of the tested site gradually ceased to recur and the nasal discomfort also subsided.

After its definite disappearance, the pollen extract was resumed. Now the phenomenon can be reproduced at will with a distal dose of 1200 units ragweed. This dose will also produce mild anaphylactic symptoms.

In explanation of the process taking place, we have a choice between the theory of J. W. Wiltser or the explanation of Rich and Lewis.

In tissue culture studies by Rich and Lewis, we have strong evidence that, in tuberculosis at least, reaction takes place in the individual cell. Here in the cell, antigens and antibody lock arms. The fluids of the body serve as carriers and the vessels only avenues through which the carriers work. The theory of James W. Will-

zer in his article on "Intrarelationship of Immunity and Allergy," is not in contradiction to this; his explanation is that antigen and antibody do not bring about the destruction of tissue but the mixture of the two develop the immune body and it is this third substance which injures the cell. He calls it the immune body. Other investigators call it histamine-like substance. Both theories are compatible. The question is: how do they explain the process taking place in our patient?

The allergic can be considered as having certain spots in the body more on the alert than others where cells develop or hold antibodies: stations or paths where allergens are slowed, stopped and destroyed or tissues which react to the immune body so formed more energetically than in the normal.

The hay fever patient now under observation received the pollen. The antibodies in the nasal mucosa arrested part of the antigen as was evidenced by the local reactions. That part of the antigen not locked by the antibodies in the nasal tissues traveled free in the blood streams and produced no damages until it met the antibodies locked in the cells as in the forearm where the test had been applied. Later when the patient was getting over the spell, immune bodies, formed in the nose and in the forearm, entered the blood stream. The immune bodies gradually flooded the system and brought on a tolerance to the antigen and all symptoms subsided.

The object of the massage was to dislodge the antibodies formed in the cells, and bring about the neutralization of the antigen in the blood streams; form immune bodies in areas where their tolerance by the fluid was greater.

Within recent years, an histamin-like substance has been recovered in the tissues when antigen and body enzymes have met and it occurred to the writer to inject increasing doses of histamin as a non-specific immunizing element.

Fifty of our allergic cases, asthma, hay

fever and skin allergy, which resisted hypsensitization to the various allergens were placed on increasing doses of histamin with the following results: Histamin, hypsensitized, 28 per cent; much improved, 14 per cent; stationary, 54 per cent; aggravated, 4 percent.

It is yet too early for final conclusions and the number submitted is as yet too small. The writer hesitated before presenting this suggestion for fear of needlessly adding to the already large list of non-specific antigens but it is only by making sincere researches and having our results checked and discussed that definite progress can be obtained. The agent was used only in very refractory chronic cases. The result has been sufficiently encouraging in the writer's opinion to suggest its use in cases of infection of whatever nature when all other known means have failed. Those interested as to the dose, dangers and contraindication to histamin are referred to a previous paper on histamin in asthma by the writer.

DISCUSSION

Dr. Eustis: Dr. Thiberge has asked me to discuss this paper on account of some work I did 20 years ago on the relation of histamin to asthma and urticaria. I think that Dr. Thiberge is to be congratulated upon the originality of his idea.

He makes no claims, which is very wise at this stage of the investigation, but he has gone at the question of allergy in the right direction. In the past, the man who has been interested in allergy has spoken too much of allergy and antigens without getting at the basic cause of the condition. I believe that this paper is the beginning of an investigation in the right direction.

SOME COMMON CONDITIONS OF THE UPPER URINARY TRACT.*

J. A. K. BIRCHETT, Jr., M. D.

VICKSBURG, MISS.

In choosing this as my subject I wish to describe the common conditions of the kidney and upper ureter met with on a general medical and surgical service, not so

much from the viewpoint of a specialist in urology but from that of the doctor who is doing general surgery.

Of the many lesions of the upper urinary tract we could write at length and not cover the subject, for we would have to describe calculus, tuberculosis, malignancy, hydronephrosis, pyonephrosis, stricture and diseases of the upper ureter and acute and chronic inflammatory diseases of the kidney. The conditions which we will outline here are the most common ones which occurred in a fairly comprehensive series of cases which were classed as urological. These most common conditions were pyelitis, hydronephrosis and nephrolithiasis. Though tuberculosis and malignancy are not common lesions in this series we beg to be allowed to refer briefly to them in passing.

Tuberculosis is conspicuous by its absence, only one case being seen and that in a child of five years of age. This is not unusual for the incidence of renal tuberculosis is on the decline. This is being noted in all medical centers, very probably because of the fight which has been and is being waged on tuberculosis in general and the fact that tuberculosis is rarely a primary condition. In other words if tuberculosis is cured in its incipency there is no secondary infection developing elsewhere. Nevertheless we should always be on guard when we see hematuria from a symptomless kidney for the symptoms in the majority of cases, 72 per cent according to Lower¹, were not referable to the kidney. The symptoms are usually referable to the bladder and because of loss of capacity and increased irritability there is frequency, straining and pain, and in children when there is marked enuresis it should be investigated, for it may be an early symptom of renal tuberculosis.

In this series of cases malignancy has occurred twice; hypernephroma in both instances, this being the commonest type of renal tumor. These cases had bleeding as an outstanding sign of this lesion. This must

*Read before the Section on Surgery at the Sixty-fifth Annual Session of the Mississippi State Medical Association, Jackson, April 12, 1932.

be differentiated from tuberculosis by careful bacteriological examination. It is well to remember that abnormal bleeding of any organ is a forerunner of malignancy. When blood is found in the urine, be suspicious. In malignancy of the kidney, pain and evidence of a mass formation are stereotyped signs and symptoms, but which are not evident usually until too late to render aid but hemorrhage is always a sign evident in the early stages when something helpful might be done.

Of the common conditions in this series we will first take up pyelitis or pyelonephritis. It is probably better to say pyelonephritis in conjunction with pyelitis for it is rather hard to conceive of the fact that the calyces and the secretory part of the kidneys can miss infection that so readily attacks the pelvis of the kidney. When we collect a specimen of urine and find pus in it, it is certainly hard to say that the infection and pus in that urine came from any one location in the kidney. This infection arrives in the kidney over several different routes. It may come through the blood stream either as a hematogenous or as a conveyor of an infection from a focus located elsewhere in the body. The infection may arrive through the lymphatics of the ureter or through the lumen of the ureter. This is known as the ascending method of infection. We may have infection developing by direct extension from an adjacent inflammatory process or from penetrating wounds of the urinary tract.

We can all recall the patient who recently had a bad cold, a tooth extracted or a boil, who was suddenly seized with chill followed by temperature of 103° to 106° associated with acute pain in the kidney region. This pain may or may not be referred but is mostly localized over the costo-vertebral angle of the affected kidney. However, this pain may be referred to the abdomen mimicking the many acute conditions occupying therein. Many harmless appendices have been removed for pyelitis even though nausea and vomiting are not usual

symptoms and pus is as a rule evident in the urine.

If pyelitis occurs as a primary condition and not due to an obstruction of the urinary outflow, it will recover under palliative or local treatment. When accompanied by an obstructive lesion there is a tendency for the development of a toxic focus and the formation of purulent material with destruction of the secretory surfaces of the kidney, which if left alone will develop into a chronic diseased condition. When this situation develops we have a chronic pyelitis to deal with. This may be confined to one or involve both kidneys. There may be retention of pus and urine without marked general reaction, only bladder symptoms being in evidence. Later, however, after the kidney substance has been destroyed there is evidence of toxemia and failure of the general health. Pain is not a marked symptom unless there is evidence of obstruction in the form of stone. In chronic pyelitis the chances of affecting a cure is only fair because of the chronicity of the infection and the tendency to recurrence. Braasch² in a recent resume of 2040 cases with this disorder, of which 251 were studied for a period of from 10 to 15 years, drew the general conclusions that one-third get well, another third improve and one-third fail to get any benefit. These results in chronic pyelitis can be improved upon if the acute cases are recognized from the beginning and receive adequate treatment from the start.

In connection with this statement it is of interest to mention the occurrence of pyelitis in pregnancy. In our series of 249 cases diagnosed as pyelitis there were 36 of these which occurred at some time in pregnancy. Of these 36 it was necessary to induce labor in eight because of the toxic condition of the mother and the inability to progress further with the pregnancy. Three others aborted spontaneously because of advanced toxemia. Of the remaining 25 cases, two delivered normally at time of first admission after receiving treatment.

The remaining 23 cases were discharged as relieved of the pyelitis to be delivered at a subsequent admission or were delivered by their home physician. The cases which aborted or in which it was necessary to induce labor were all cases in the later months of pregnancy, whereas those which recovered and were able to continue to term were the cases in which the pyelitis was recognized early and adequate treatment could be instituted in time to evade the impending danger. Very often a catheterized specimen of urine taken at regular intervals would put us on guard that infection is developing in the urinary tract. Pyelitis in pregnancy is due to the obstruction of the ureter because of the pressure of the heavy dependent uterus, with stasis of the urine and secondary infection. This is noted more commonly in the right kidney because of anatomical reasons.

The diagnosis of pyleonephritis is based upon the finding of pus in the urine with other customary signs and symptoms of pain, leukocytosis and high temperature. The renal function may be markedly decreased depending upon the amount of retention and back pressure on the kidney substance. The function should be interpreted carefully for kidneys of this type have been sacrificed needlessly at operation when a second check should be made on the renal function after the acute stage has subsided so as to enable us to get the real functional value of the kidney. If there is disturbance of the urea nitrogen of the blood then both kidneys are affected. When there is lowered renal function in one kidney there is no change in the blood chemistry. In other words the true work of a kidney under the influence of a pyleonephritis should never be judged until the acute condition has been allowed to subside. This being done no useful kidneys will be sacrificed.

The most conservative treatment is repeated pelvic lavage of the affected kidneys by ureteral catheter with antiseptic solutions, silver nitrate being one of choice, the

use of urinary antiseptics orally and intravenous therapy.

HYDRONEPHROSIS

The next important condition in this series common to the upper urinary tract is hydronephrosis. This is the collection and retention of urine in the pelvis of the kidney. The causes of hydronephrosis are many, the fundamental cause being obstruction, with retention and damming back of the urine. These obstructions are due to abnormal congenital development and structural abnormalities. They are also present because of acquired conditions. For example, the congenital causes are tight foreskin, and stricture of meatus and urethra in the lower tract. In the ureter we have abnormal valves and constrictions, or double and triple ureters, and increased mobility of the kidney with resulting deformity of the upper ureter. This is the so-called kink due to the presence of abnormal blood vessels and adherent bands. Cabot³ states these are present in four per cent of all autopsies where the lower pole of the kidney was studied and he further states that 70 per cent of all hydronephrosis is directly due to this deformity. Of the acquired causes there are many. The obstructive lesions of the genitalia are stricture, tumor and conditions developing in the urethra such as hypertrophy or malignancy of the prostate. In the upper tract we have obstructive factors such as calculus, stricture of the ureter, growths in the kidney itself, or pressure of adjacent organs. Hydronephrosis develops without evidence of an obstruction. This is because of the loss of tone of the pelvic wall secondary to neurological disturbance. With the loss of nerve control the pelvis relaxes developing a larger receptacle in which urine may collect.

The symptomatology of hydronephrosis is not definite. It is possible for this condition to be present for some time and not give evidence of being present until an infection develops and we recognize the picture of pyelitis. For this reason hydronephrosis is known as a silent lesion of the

kidney. In 38 per cent of the cases according to Lower¹ the condition was not recognized until later developments ensued. When there is pain it is usually localized in the kidney region because of back pressure and irritation of the renal substance.

The diagnosis is based on findings made possible by the cystoscope with aspiration of excessive amount of urine by ureteral catheter. The kidney pelvis may be injected with normal saline until discomfort is felt and the amount of fluid withdrawn measured to determine the pelvic capacity, more than 15 cubic centimeters being regarded as abnormal. Opaque media such as sodium iodide or less irritating iodized oil may be injected into the renal pelvis and a radiograph made, the roentgen ray shadow of the outline of the kidney pelvis being readily discerned. Cabot³ warns of the danger of injecting opaque media into the kidney pelvis, especially when there is a hydronephrosis of large size, that is, where the capacity is as much as 75 to 100 cubic centimeters, as it might be forced into the diseased kidney substance with resulting irritation and necrosis. I have had this experience in one or two cases in which sodium iodide was used, the patients complaining of intense pain over the renal area with severe reaction evidenced by rigor and marked elevation of temperature.

As to the treatment of hydronephrosis, the results vary to a great degree. The first step is to find the causative factor and to facilitate its removal. It is desired to know whether the lesion is unilateral or bilateral; whether it is associated with stone or angulation of the ureter as the causes of the obstruction and if there is an infection present. If it is due to calculi, this may be removed surgically or the ureter may be dilated by use of catheters to make room for the stone to pass. When there is a kink in the ureter we either try to splint the ureter to straighten it out or replace the kidney in its normal position by the use of abdominal support. The kidney may become fixed in a

normal position by several well known surgical procedures and the severance of anomalous blood vessels and bands which obstruct the ureter. The treatment of unilateral hydronephrosis is without best results when damage to the renal tissue has developed, because of the lack of resistance and low recuperative powers of the kidney. When there is bilateral hydronephrosis the reparative forces are stimulated by this excess tissue damage and more repair stimulated. This is the phenomenon of renal counterbalance and explains why better results are obtained when there is treatment instituted in bilateral disturbances than in the unilateral. This counterbalance is the well kidney doing the work of the sick one. The unhealthy kidney not having to function because of the efforts of its fellow makes no attempt to affect sufficient repair to resume its normal work. For this reason bilateral lesions due to any disturbing factor, on which surgical repair is done in either of the affected kidneys will show an improvement in the renal function. Gradual reduction of the intra-pelvic tension by regular periodic drainage by cystoscope and ureteral catheter is the best type of treatment as far as palliation is concerned and affords relief in many cases.

NEPHROLITHIASIS

Calculus is a common lesion of the upper urinary tract with which all of us have had varied experience. It immediately brings to mind the discomfort and suffering of the one so afflicted.

The cause of urinary calculus is still indefinite and somewhat theoretical. The causes given are varied, being classified as physiological, metabolic, infectious and chemical in origin. We have infection in the kidney as a primary nucleus of stone, calculus being commonly present when there is evidence of local infection. Anatomical abnormalities are probably accepted as the commonest cause of calculi, the abnormalities present causing stasis of the urine with resulting precipitation of the chemical elements of the urine which form

centers for further calcification and stone building. All of the above reasons for stone formation have a plausible explanation and any one or combination of these conditions may be an answer to the cause of this painful formation, renal calculi.

Renal stones vary as to their size, density and composition. The nucleus or center is that part which is first laid down because of crystalloid elements, blood clots or foreign bodies such as gauze or wax. The calculus gradually grows by having further precipitation added to its surface and becomes laminated or of layer formation, the chief constituents of calculi being uric acid, urates, calcium oxalate and phosphates. Stones made up of these salts are known as hard stones and show up in the roentgenogram more clearly and with less confusion with other shadows than do soft stones or those calculi which are composed of blood clots, fats and cholesterol.

The presence of the calculus in the urinary tract may manifest itself in three ways,—by evidence of infection, irritation or obstruction. It is possible to have all three as a combination in any case and we frequently do. Calculi usually set up an irritation at their site of origin but they can readily migrate elsewhere. A stone which has been found in the tubules or calyces may pass into the pelvis, thence to the ureter and to the outside world with the usual train of signs and symptoms. However, it may become impacted in the ureter causing a dilatation above with hydroureter through which it later regurgitates back into the pelvis where it is left to grow and become a mechanical irritant. What of the stone that develops in the tubules of the cortex and which do not pass out? They become encysted after causing severe local inflammation in the kidney substance with resulting fibrosis and contraction and deformity of the kidney. Abscess may develop with subsequent rupture and severe hemorrhage, sometime fatal. Stone has caused rupture of calyx with extravasation of urine into the lumbar region with

resulting toxemia and death. In the presence of stone in the ureter we usually have symptoms of obstruction and irritation though we seldom have a total block of the urinary flow. This is because of the irregularity of the stone. The lumen of the ureter is not entirely blocked unless irritation of the ureteral wall develops and inflammatory edema which results in total obstruction with back pressure and renal irritation. Infection develops secondarily to the inflammatory reaction. When this condition occurs we get lowered renal function, signs of an inflammatory process and general toxic disturbance.

The common signs and symptoms of calculus are easily recognized, pain being the symptom of greatest importance. It may be localized or it can be referred. With calculus remaining in the kidney the pain is usually felt in the region of that organ but it can be manifested in the shoulders, back of neck or distributed generally over the abdomen. These aberrant symptoms were especially noted in a series of cases cited by Caulk⁴. Braasch⁵ states that in 67 per cent of cases suffering with ureteral stone the pain is referred to the kidney. This is probably due to the urinary retention and pressure within the renal pelvis. The signs or presence of renal and ureteral calculi are noted in the urine by hematuria, the outstanding finding, but its absence does not rule out the presence of a stone. Pus and bacteria are present after trauma has caused inflammatory developments. Infection and abnormal urine as a rule are present after an attack of renal colic.

The diagnosis is based on the physical findings arrived at by cystoscopy, and laboratory and roentgen ray study. It is important to mention the confusion which may result from mistaking fecoliths, calcified glands and gall stones for renal calculi. This has been done and for that reason when in doubt do a pyelogram of the suspected kidney to see if it corresponds to the suspected shadow in that particular region. In ureteral stone the roentgen ray

catheter or uretogram may be used to identify its location. Uroselectan may be used to differentiate renal shadows. This is really doing a pyelogram or uretogram in reverse order. In shadows of the right renal region we must be able to differentiate between renal and biliary stones. This is facilitated by the visualization of the gall bladder by the well known methods.

The treatment of renal calculi is essentially surgical. No medical treatment which can result as a prevention of this formation has yet been developed. Quinby⁶ states that it is the concensus of opinion that once a stone is definitely known to be in a kidney that it should be removed. There are exceptions to this rule. A case for instance who has renal stone associated with some other serious organic disease will be a mortality from surgery performed to remove the stone, the real cause of the failure being the poor general condition of the patient. A stone may be obstructing the pelvic outlet with renal damage and secondary infection because of back pressure. This stone may be easily removed by simple pyelotomy. Large calculi develop an extensive irritation and ulceration and chronic infection resulting in destruction of that kidney with loss of renal function. In a condition of this sort the shortest way out is to do a nephrectomy. As an opposite to this we may have a stone which completely fills the renal pelvis and apparently extends into the calyces and this stone may never cause trouble because of the ability of the urine to flow on unobstructed and without any infection developing. It may never be necessary to molest this stone or kidney. In stone of the cortex when there is pain or signs of an inflammatory process we advise removal because of the danger of the development of extensive abscess with kidney destruction and the possibility of extension into the lumbar region with extensive abscess formation there. This type of stone is removed by nephrotomy. Stones in this location become difficult to locate at operation, though they were observed with

ease after the making of the roentgenogram. To facilitate the location of the position of the calculus in the kidney substance the fluoroscope is of great value at the time of operation. The kidney is lifted as much as possible from the lumbar incision the stone being located with the fluoroscope and pointed by thrusting a needle into the renal substance till it makes contact with the stone. The nephrotomy incision is then made with the needle as a guide, the stone identified and removed.

I have opened a rather broad subject and have not attempted to go into detail for time does not permit. However, I have attempted to describe some of the common conditions and problems in the treatment of certain common lesions of the upper urinary tract which come under the care of the general surgeon daily. With this desire in mind I wish to thank you for your indulgence.

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DISCUSSION.

Dr. John Darrington (Yazoo City): I listened to this paper very attentively and certainly found it both interesting and instructive. I want to congratulate the essayist on giving us such abundant information in the short time allotted him, and as I listened to the paper I realized that if some of we older men could just pull back the curtain of time and look back twenty-five years to what we did for patients then, we would appreciate the wonderful advance that has been made in the treatment of these diseases of the upper urinary tract. You remember in the old days when a man came complaining of a long list of symptoms we gave him a urinary antiseptic, and next week we gave him another, and that is about all we did. I am so sorry I had not heard the Chair-

man's address at that time, because I could have put a rose under his nose and let him look at the beautiful green grass, listen to the birds sing, and that might have gotten his mind off his ailment. I believe it would have done about as much good as our treatment at that time. If one could make an urinalysis that was about as far as he went. If he was an extra good doctor he could make a microscopic examination and discover pus and blood cells. Or he could introduce a sound, and when he heard it hit a brickbat he made a diagnosis of stone in the bladder.

What has helped us out? Mechanical appliances. We do not know much more about the pathology of urinary infections than we did twenty-five years ago. We know abnormal metabolism and infection produce stones.

If a doctor twenty-five years ago had had a cystoscope he would have had all the medical men coming to peep through it. A step farther and we have the ureteral catheter. The roentgen ray was of no account until we found we could put fluid in and then use the roentgen ray. So we must give these mechanical aids a lot of credit for our advances in diagnosis and treatment of these diseasss.

I congratulate the essayist on having presented a 1932, the "last word" diagnosis and treatment of diseases of the urinary tract.

Dr. P. G. Gamble (Greenville): Most of these conditions are due to infection through the bloodstream, or an ascending infection through the lymphatics, and the stones are usually followers of infection in the pelvis of the kidney or somewhere in the kidney substance. If you stop the infection or remove it you will have fewer stones, and I think we should make an effort to remove all foci of infection—bad teeth, tonsils, or whatever it may be, and this condition will clear up quickly, the stones becoming fewer.

Dr. Birchett (closing): I think it is very appropriate that this paper should be brought before the general meeting, because it is on the shoulders of the general practitioner that the burden falls of treating these cases. If we cannot handle these cases ourselves we can recognize the danger sign, and send the patient where his best interests will be served.

I would like to say a word about hematuria—blood in the urine. Dr. Hume made an able discussion of this subject at the last meeting of the Southern Medical Association, and brought out the point that blood in the urine is nearly always a serious condition—in about 90 per cent of cases. In the absence of acute posterior urethritis and other acute conditions, it is nearly always serious, and a patient passing blood in the urine should be given the same careful consideration that we give to a woman with a lump in her breast, or irregular bleeding from the cervix.

Another thing is ureteral colic. We see this oftener than any other lesion of the upper urinary tract, and the reason is that the patient in pain seeks a doctor. When we see one of these patients, what is the best procedure? I think the procedure should be conservative—morphine, forced fluids, and leave them alone to see if Nature will not pass the stones into the bladder and the patient be relieved. We cannot leave them alone, however, if we get two signs, temperature and pain in the back. When we get these signs we know the stone is impacted and we have infection with all the chain of complications to which it leads. But if the symptoms are generalized we leave them alone until we get pain in the back and temperature.

ACUTE OSTEOMYELITIS: TREATMENT AND IMPORTANCE OF EARLY DIAGNOSIS*

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TUPELO, MISS.

This paper is not an academic one and I should like to preface my remarks with an apology to the orthopedic surgeons to whom this subject rightly belongs. I would like for it to be a plea from hundreds of maimed and crippled individuals who represent our mistakes of the past. We all have these living monuments.

In a review of the literature, over a period of the past seven years, since I have been a subscriber, I have found less than one dozen articles on acute osteomyelitis, appearing in *Surgery, Gynecology and Obstetrics*, *Annals of Surgery*, *Journal of the American Medical Association*, and the *New Orleans Medical and Surgical Journal*. As far as I was able to ascertain, two papers have been read before this association in that period. Certainly, there have been numerous articles published in orthopedic journals, but I have reference here only to literature available to general surgeons and practitioners. The four I enumerated above are representative of this type. I believe the gravity of this disease with its deforming and disabling possibili-

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ties warrants more consideration from the general surgeons and medical men and therefore I offer no apology for presenting this old subject to you again.

Acute osteomyelitis is chiefly a disease of childhood occurring most frequently between the ages of two and twelve years, due no doubt to the marked vascularity of the growing bone at this age plus a predisposition to injury. The predisposing factors are anemia and malnutrition. The primary foci of infection can usually be located in some other part of the body such as infected tonsils, boils, abscesses, carbuncles, infected wounds, and abrasions. The infecting organisms, which are most frequently the staphylococci, streptococci, pneumococci, and typhoid bacilli, are transmitted by the blood stream to the site of infection, except in the traumatic type complicating compound fractures, which are purely local.

The site of the primary infection is usually in the loose cancellous portion of the long bones, adjacent to but not involving the epiphysis, unless it be late in the disease. The end-artery system and sluggish circulation in this area are thought to be causative factors for the lodgment of infected emboli here. The spread of the disease from the site of infection is from within outward through the cortex of bone which is thinner in this area than over the diaphysis. Following this rupture outward the periosteum becomes stripped from the bone and as pressure increases rupture into soft parts takes place. If treatment be delayed the process will enter into the chronic stage and sequestration will gradually follow. It is also through this delay that the medullary canal becomes infected from without inward through the Haversian canals.

CLINICAL SIGNS AND SYMPTOMS

An early diagnosis is essential if we are to avoid a surgical catastrophe with possibilities of recurrent disability or permanent deformity throughout life. I believe I am justified in saying the average practitioner is not aware of the frequency of

acute osteomyelitis in children. He is not alert to catch the symptoms and manifestations of this disease as he is the less formidable and commonly diagnosed acute appendix, and yet I dare say the diagnosis is just as easy. It is a condemning fact that in a recent review of the histories of a large number of cases, made by an eminent orthopedic surgeon, shows that almost every patient is seen the first forty-eight hours by a physician; however, about 75 per cent of them have been diagnosed and treated for rheumatism for one to three weeks.

The symptomatology of this disease varies in direct ratio with the intensity of the bacteremia present and extent of area involved locally. Therefore, it goes without saying, that in all cases we do not see the classical picture of unbearable pain, rigors, high fever, etc. Some cases of acute osteomyelitis run a low grade course, are slow in onset and limited in area involved, and again we recognize another type in which the bacteremia is the predominating feature terminating in early death before much local manifestations are noted.

The most frequent type of case will present severe throbbing and constant pain, located near a joint, accompanied by a point of extreme tenderness at or near the epiphyseal line of a long bone, high fever and rigors, rapid pulse, marked signs of toxemia, and a polymorphonuclear leukocytosis. These clinical signs, usually in a child, together with a history of primary foci and possibly an injury to affected parts, make the diagnosis of acute osteomyelitis justifiable. If we see these patients after the periosteum has been elevated and rupture has taken place into the soft parts, we may add to above signs, swelling, redness, and fluctuation.

DIFFERENTIAL DIAGNOSIS

The differential diagnosis will of course determine the course of treatment and is, therefore, very important. Acute rheumatic fever, as stated above, is the commonest condition by far for which acute

osteomyelitis is mistaken. Non-articular symptoms are uncommon in rheumatic fever; hence, a severe toxemia with symptoms found only about one joint should arouse one's suspicion. In rheumatic fever the pain with swelling and tenderness is in the joint, not in proximity to it, all the signs are articular, and all movements of joint are painful. The toxemia in acute osteomyelitis is greater, hence the leukocyte count will be higher, the pulse faster and the temperature higher. Rheumatic fever is rare in adolescence—osteomyelitis most frequent at this age. If after considering these facts, doubt still exists, exploratory puncture of the metaphysis should be made. In the rheumatic condition this will do not harm, and in the osteomyelitis it will safeguard the patient. Other conditions, such as typhoid fever, cellulitis, and infective arthritis should be kept in mind but are rarely difficult to eliminate. Roentgen ray findings are of very little or no value during the early stage.

TREATMENT

In no other acute inflammatory condition does the prognosis depend more largely on the time at which a correct diagnosis is made and efficient treatment instituted. When the diagnosis is made, or as stated above, even strongly suspected, surgical interference is demanded at once. After considering the mode of onset and the pathways of the spreading osteomyelitic process we should arrive at a definite technic that should have for its aims the following principles:

1. Early and effective drainage.
2. Preservation of healthy bone tissue and avoidance of spreading the infection to unaffected areas—medullary canal and adjacent joint.
3. Combating the systemic infection and toxemia by blood transfusions, etc.

Early and effective drainage implies not only incision through the periosteum to

relieve tension in a subperiosteal abscess but also by drill holes or window into the loose cancellous area of the metaphysis. The subperiosteal abscess is secondary to the primary focus in the bone, and although there is present a hiatus leading into the bone, this will not be of sufficient size to permit drainage and relief of tension inside of the bone. In making these drill holes care should be taken lest they penetrate the medullary canal or the epiphyseal cartilage and thus spread the infection to the adjacent joint or medullary canal. This can be avoided by using the technic as advocated by Dr. Starr of Toronto. It is also very important that the incision through the periosteum does not extend beyond the epiphyseal line in order that the attachment here may be preserved and the joint be thus protected. The after care of the wound consists of moist dressings with mild antiseptic solutions. Immobilization of the limb by a back splint is usually advisable. In those cases showing no pus beneath the periosteum it is usually wise to proceed further and make an opening into the bone. If done under strict asepsis no harm will be done if there is no infection present and immeasurable benefit if it be present. The systemic treatment should consist of supportive measures such as glucose, high caloric diet, and blood transfusions.

The early diagnosis and treatment I have just outlined for you is Utopian; however, it is regrettable, but true, that few cases are seen early enough to carry out such treatment. I have had infinitesimal number and I feel sure my experience has been practically the same as other general surgeons. It is for this reason this paper has been presented to you, that I may again call your attention to this most important disease and make a plea for early diagnosis.

The majority of cases referred to me are like those referred to most general surgeons, with extensive bone necrosis, beginning sequestra formation, etc. In cases that fall in this category I have used the

modified Orr technic with very gratifying results, and I should like to digress from the main object of this paper in conclusion and give you a brief resumé of a case treated in this manner.

The patient was a female, aged 9, who had been ill for seven weeks prior to admission to the hospital, April 23, 1931. The history was that of the usual case of osteomyelitis.

The physical examination revealed a very much emaciated and anemic white child. The right leg was held in flexion and carefully guarded by the patient. There was marked swelling of the entire leg extending from the knee downward. There was angulation of the leg just below the knee, denoting a pathological fracture. About three inches below the knee and on the anterior surface of the leg there was a sinus discharging pus. (This was a stab wound made by family physician two weeks prior to admission.) Roentgen ray showed marked necrosis throughout the entire length of tibia with a pathological fracture through the metaphysis.

After preliminary preparation operation was performed. A tourniquet was applied above the knee and an incision through the soft tissues, fascia, and periosteum was made throughout the entire length of the tibia just medial to its anterior surface. The bone was unroofed and saucerized from one epiphyseal line to the other, being careful to leave no overhanging edges. All diseased tissues were removed gently with curette and oozing controlled by hot packs. After the wound had become dry it was swabbed with iodine solution followed by alcohol. A vaseline gauze pack was then inserted loosely and wound dressed. After making proper alignment at the fractured site, a plaster spica cast was applied from the hip to the toes. Forty-eight hours after operation patient was discharged to return in one month for the first dressing. At this time a window was cut in the cast over the entire length of the wound and

vaseline gauze pack removed. At this time there was abundant healthy granulation tissue present in the saucerized area of bone which had partly extruded the pack. The wound was again mopped with iodine followed by alcohol to prevent secondary infection that may have been introduced at the dressing and vaseline gauze reinserted. This procedure, monthly dressings, was repeated four times and at the end of the fifth month cast was removed and wound completely healed. Her total time in the hospital was less than one week and a total of four dressings were applied. In comparison with the old methods, with prolonged hospitalization, daily painful dressings with various antiseptics, I think this method is far superior as regards results, comfort and economy for the patient, and as a time saver for the physician.

DISCUSSION

Dr. Murray Davis (Memphis, Tenn.): I think in discussing this paper probably the best I can do will be to urge you to do a little preventive medicine in better education of our people. As the doctor has told you, it happens more frequently in young individuals, and as a rule more frequently in the city than in the country. As to sex, it happens probably more frequently in boys because of their roughness and playfulness—making them more liable to injury.

The doctor should urge people to watch out for foci of infection, train them to look out for minor things. I think this will prevent more osteomyelitis than any other thing. As the doctor has said, this condition often occurs in childhood, and given a child between two and twelve with acute, sudden onset of severe pain in the end of the long bone, with points of tenderness, high fever and rapid pulse, and there can hardly be any doubt of the diagnosis. The differentiation the doctor has brought out very well, and we should remember that no positive findings are obtained by the roentgenogram. In other words, a negative roentgenogram is probably one of the helpful factors. The thing to do is to make an early diagnosis and get to the treatment; open up at the point of maximum tenderness over the point of maximum pain, but do not do too much. So many times children do not stand surgery well and the least possible amount of trauma is the best for them. We should of course make the opening large

enough to get down to the bone and establish drainage, and quit. Do not operate much nor do too much treatment.

Dr. Joseph E. Green (Richton): I do not do any operating, but being connected with a charity hospital I have to do a lot of holding to accommodate other people. I think this is a timely paper the doctor has brought to us, and if there is any way possible we should impress upon ourselves and our confreres the importance of this condition. I notice the doctor from Memphis says the most of it is in the city. But you have not practiced in the woods, doctor. I thought most of it was in the country. At the charity hospital they come in numbers—most of the time we have one or two cases of osteomyelitis. They are mostly in children from twelve down.

I want to report two cases. I recently spent four months in New Orleans, and spent a good deal of time in Dr. Isadore Cohn's department. The first case was a baby six months old, brought in with double osteomyelitis of the tibia. A good doctor had treated the case for a week or ten days. I believe doctors could diagnose these cases better if they tried. The first thing is to do lots of looking and lots of talking. Get the child's mind off of what you are going to do. This baby fell off the bed, and in 24 hours developed rheumatism which could not be eased. A look was all that was necessary. There is a glittering appearance that is not found in anything but osteomyelitis. I think the surgeon must have taken off nearly all of the upper third of the right tibia. He found lots of pus. In a few days when this child was ready to go home it developed in the hip. The doctor went in. The thing to do is to get drainage. Then the patient must be well fed and have plenty of water—he must be supported. That baby went home well.

Another case came in that had been treated by a good doctor. He wrote a long letter explaining that he had watched the case very closely, that he knew it was rheumatism, but the patient did not respond to treatment. The child was desperately sick, dehydrated, almost delirious. I laid my hand on the knee very gently, and I thought "osteomyelitis."

As a general practitioner treating children I do not use surgery. If you get the history of a fall and in 24 to 48 hours the child has pain and tenderness, do not wait to treat that case; unload it on a skilled surgeon. Early diagnosis, early in the hands of a surgeon, proper surgery and drainage, plenty of food and water, and they will get well.

II. THE RATE OF ABSORPTION FROM EXTENSIVE SUPERFICIAL BURNS

ROBERT KAPSINOW, M. D.

LAFAYETTE, LA.

Previous communications (I) (II) have reported that the presence of a toxin, prepared by extracting burned skin, which had formerly been considered the cause of death in extensive superficial burns, was unwarranted. Data were presented indicating that the so-called toxin was in reality alcohol that had failed to be completely removed. The confusion resulting from this error which had been handed down in the literature, has been obstructing the clarification of the burn problem.

In order to determine still further the possible presence of an unknown toxin that has hitherto been undiscovered and that some may yet feel is present in the burned skin, a group of experiments was performed to study the rate of absorption from extensive superficial burns. Granting the presence of an unknown burn toxin, it is obvious that to produce symptoms the substance must be absorbed from the injured area into the blood.

Advantage was taken of our knowledge of the behavior of phenolsulphonphthalein.† When injected subcutaneously³ this dye, introduced in a dose of 0.6 mgm. subcutaneously in normal rabbits that have previously been supplied with 50 c.c. of water by stomach tube, will rapidly pass through the urine. The present investigation was divided into three sections: (a) Injections of P.S.P. into normal rabbits; (b) injections of P.S.P. in burned animals, the dye being introduced at a site remote from the injured area, usually the back; (c) injections of the dye into the burned area. Injections into the burned animals were made at varying intervals after burning. In all three sections the animals were treated alike; *i. e.*, each re-

†P.S.P. is used hereafter for phenolsulphonphthalein.

ceived the same dose of the dye after the introduction of 50 c.c. water by stomach tube. Specimens of urine were obtained by expression of the bladder at the end of one and two hours. Urine collected over longer intervals was estimated in 24 and 48 hour periods. The dye output was determined with the Duboscq colorimeter.

OBSERVATIONS (FIRST EXPERIMENT)

Normal animals—There was a considerable variation in the dye elimination but the extreme limits were not widely separated. The average first hour output was 51 per cent and the second hour 34.5 per cent. The average total two hour elimination was 86.0 per cent.

Burned animals injected at a remote site—During the first eight hours after the burn was sustained, there was an apparent delay in the rate of elimination of the dye. Later the rate of absorption approached very closely that of the normal animals. The average output for the first hour was 48.0 per cent, the second hour 34.0 per cent. The average total two hours output was 82.0 per cent and for the total 24 hours 92.0 per cent. This demonstrated that for the period and conditions of this study, there was no failure on the part of the kidneys to eliminate the dye.

Burned animals injected in the burned area—A study of the data indicated an entirely different result. The rate of elimination of the dye was greatly delayed during the entire 72 hours of the experiment. The animals were not carried further because beyond this time the injured skin cracked and the edema fluid present leaked out with an invariable loss of the injected dye from the wound. The average for the first hour was only 6.0 per cent, for the second hour 4.5 per cent, the average total two hour period 10.0 per cent. Excretion after 24 hours was only 20.5 per cent, and after 48 hours there was still a retention of the dye in considerable quantities held in the burned area.

The delay in the excretion of the dye from the burned area seemed to definitely

indicate a failure of the organism to absorb more than a mere fraction from the site of injury. This observation agrees with other investigations,⁴ that the need for water in the case of the burned animals is much greater than normal and undoubtedly a portion of the water supply is diverted to the wounded area from the usual urinary channel. Even after 72 hours there is evidence of a greatly decreased reabsorption into the blood stream from the injured area.

It is obvious therefore that the premise of the presence of a toxin which might be absorbed from an extensive burn and which causes the symptoms noted, at least during the first 72 hours following the burn must be fallacious. These experiments indicate a holding back rather than a pouring out into the blood stream of any supposed toxin from an extensive superficial burn.

As further evidence that the spectre of a toxin elaborated in burned skin inducing detrimental influences is groundless, a group of experiments utilizing the well-known action of strychnine to produce convulsions and death after subcutaneous administration, was employed. Strychnine is considered one of the most potent poisons from point of view of rapidity of action and size of dose required. In these regards strychnine has no rival.

This series of experiments was likewise divided into three parts: (1) The appearance of convulsions and death in normal animals after injection of the minimum lethal dose; (2) the effect upon burned animals injected at varying intervals of time thereafter at a remote site, usually the back; (3) the time response of symptoms of animals injected in the area of the burn. The dose of strychnine nitrate used was the usually accepted minimum lethal dose of the rabbit, namely, 0.6 mgm. per kilo.

OBSERVATIONS (SECOND EXPERIMENT)

Normal animals—Twelve rabbits developed convulsions between 5 to 22 minutes after receiving the M.L.D. The average

time was 12 minutes. Eight died in 25 minutes. Only 33 1/3 per cent recovered.

Burned animals injected at a remote site—Injections made at varying intervals after burning indicate that a slight delay in the onset of convulsions occurs, the longest interval being 35 minutes, appearing 1 hour after the burn. The average period of onset was 15 minutes. This tends to correspond with the lagging of absorption noted in the first 3 hours when P.S.P. was injected in the back of burned animals. Of this group 62.5 per cent recovered. Fluid is everywhere being withdrawn and transported to the area of the burn and this may account for the delay in the onset of symptoms in this group.

Burned animals injected at the site of the burn—This series conclusively demonstrates the failure of the onset of symptoms when such a potent poison as strychnine is injected into the burned area. The onset of convulsions immediately after the burn was to be expected since the capillary damage had not yet been exerted. Of this group 84.4 per cent were alive after 24 hours. That there is, however, some slight absorption of strychnine must be evident from the P.S.P., but the quantity is so small that at no time is there enough in the circulation to produce characteristic symptoms. Other animals received five times the M.L.D. in the burned area without any harm. Therefore, the presence of an unknown toxin that would have a more rapid absorption rate and that would be more potent than strychnine as indicated in these experiments is absurd, and to suppose such a toxin is but to muddle the solution of the burn problem.

CONCLUSIONS

The rate of absorption of P.S.P. and the failure to elicit symptoms following the injection of large doses of strychnine at the site of an extensive superficial burn is offered as further proof that the constitutional changes due to this injury is not due to an alleged toxin elaborated in burned skin.

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THE REFRACTION PATIENT*

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There is a wide-spread belief that examination by an ophthalmologist is an expensive and unnecessary preliminary to the wearing of glasses.

An optician remarked to me that he did not see why an eye specialist should get a higher fee than he for making a trial case test. Neither do I, but it must be very exceptional for an ophthalmologist to make no more than a trial case test—certainly more exceptional than for a non-medical examiner to fit glasses for diseased eyes that need other treatment.

The ophthalmologist has had education and experience in general medicine and can recognize the effects of various systemic diseases on the eye, as well as disease of the eye itself. He endeavors to make an examination that enables him to give the patient the best advice and treatment possible, based on the information obtained and his own knowledge. Let us suppose a routine examination, making comments as we proceed.

History: Age and occupation. What is the present complaint and what is the duration of it? Headache? What part of head? When does it come on? Does it keep you awake at night? Do you wake with it? Is it brought on by eye work? How is the general health? Have you worn glasses? The symptoms of eye-strain are usually of more than a few days' or weeks' duration. The headache of eye-strain is rarely very

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severe and is rarely present on waking in the morning.

The patient is first seated facing the light for external examination of the eyes. A persistent hyperaemia of the conjunctiva may be caused by accommodative or muscle strain; dandruff, dust, lint or some other external irritant; alcohol or other chemical poison; toxæmia, such as intestinal intoxication, food idiosyncrasy, pyelitis, oral sepsis, infected tonsils, etc.

The pupil reaction is noticed. The Argyll-Robertson pupil is significant of disease, especially tabes. Unequal pupils may mean disease, may accompany unequal refraction of the eyes, or may be merely a peculiarity.

The tension of the eyes is taken by palpation. If increased tension is suspected, the tonometer is used.

The next step is the use of the ophthalmometer. Small readings mean little in my hands except that a reading of from 0 to .50 with the rule indicates no astigmatism. If a large corneal astigmatism is found, we know at once that the patient needs glasses and have an approximation of the amount and axis of the cylinder.

The patient is next seated at the trial case and the vision taken. About .75 less than the cylinder indicated by the ophthalmometer is placed in the trial frame and the sphere is increased until vision can not be improved further. The crossed cylinder is now applied in the first position (coinciding with the cylinder in the frame) and in the second or opposite position. The cylinder is increased or diminished depending on which position of the crossed cylinder gives the better vision. The sphere is tested with a plus and minus .25. The axis of the cylinder is tested by rotating back and forth until the letters begin to look worse, and selecting the midway position. The crossed cylinder is then tried again and so on until the two positions of the crossed cylinder give equal vision or until the second position gives better vision than the first.

If there is no cylinder in the trial frame,

the crossed cylinder indicates whether a cylinder is accepted.

The muscle balance is now tested with the Maddox rod and the muscle strength with prisms. The hypervergence, divergence and convergence should be in the ration of 3; i. e., 2 to 3, 6 to 9, 18 to 27. An imbalance or a weakness of duction in one of the three directions calls for examination of the nose and throat for pressure in the middle turbinate region, sinus disease, infected tonsils and adenoids. Weakness of all the exterior muscles may indicate a general asthenia.

Paresis of the ocular muscles usually manifests itself by diplopia at distance. The paretic muscle may be found by moving a candle from side to side and up and down at a distance of 9 to 10 feet, while the patient keeps it in fixation. Diplopia appears and increases as the candle is moved in the direction of action of the paretic muscle.

Paresis is significant of injury or disease, such as skull fracture, syphilis, rheumatism, diabetes, influenza, diphtheria, encephalitis, focal infection. Syphilis most usually affects the third nerve, but may affect all of the ocular nerves. Paralysis of accommodation alone, if not due to a cycloplegic, may be caused by diphtheria or food poisoning.

The near point is now taken and enough sphere added to bring the near point up to about 10 inches. It is well to take the muscle balance at the reading distance as a near exophoria of more than 10 degrees may prevent comfortable reading with the glasses.

In the above trial case test it is assumed that the patient is a presbyope. The final step is the ophthalmoscopic examination, which is especially important in presbyopes. For this, a mydriatic is usually necessary. Two or three drops of cocaine solution instilled at 2 or 3 minute intervals, followed by one drop of 3 per cent ephedrine solution gives sufficient mydriasis in twenty or thirty minutes.

In patients under the presbyopic age a cycloplegic is generally used. I use it in nearly every case at the first examination. I often omit it at the second examination if the glasses have been worn constantly.

As a cycloplegic, homatropine has been satisfactory in most cases. Two or three drops of 3 per cent solution are instilled at ten minute intervals, preceded by one drop of cocaine solution. The examination may be started in thirty or forty minutes. In young children a good method is to instil one drop of homatropine in each eye at bed time, one drop on rising and one drop before starting to the office. In strabismus patients, one per cent atropine solution is instilled three times a day for three days before the examination. When the pupils of an adult are dilated it is good practice to instil a drop of 0.5 per cent eserine into each eye at the conclusion of the examination.

When a cycloplegic is to be used the preliminary trial case test is not so thoroughly done, the main object being to find how much sphere is accepted. This helps in prescribing the glasses when a post-cycloplegic test is not made.

When a cycloplegic is used the patient is first refracted with the retinoscope. In young children the main or entire reliance in determining the refraction is placed in the retinoscope. In other patients the final resort is the trial case test. The correction found by the retinoscope is put into the trial frame and is improved as much as possible by testing alternately with the spheres and crossed cylinder as already described.

If the patient is an adult with a large or complicated error, it is advisable to make a post-cycloplegic test before prescribing.

The ophthalmoscopic examination is made just before the retinoscopy when a cycloplegic is used. In other cases it is usually made last, as soon as enough mydriasis is obtained.

A strong convex lens is rotated behind the ophthalmoscope and opacities in the

lens and vitreous are looked for. If a slight opacity in the lens is found, it is not advisable to tell the patient he has cataract until the opacity is found to be progressing. Lens opacity is often only one of several pathologic changes in the eye, and may be the least important. I saw a patient with marked angio-sclerosis and degenerative appearances in the retina and slight opacities in the lens, who had been told that she had cataract. She spent her last years worrying about an operation that would never be done. I have seen patients who had gone blind from glaucoma while waiting for a cataract to mature. I offer as a practical definition of cataract: an opacity of the crystalline lens sufficient to prevent useful sight, or a lesser opacity that is progressing.

The fundus is now brought into focus and examined. A haziness or cloudiness of the disc and adjacent retina indicates an inflammation due to some infection or toxemia. I have recently seen two such cases, one of which was found to have malaria and the other to have malaria and tape worm.

The nerve head is inspected to see if it is pale or hyperaemic; if the edges are distinct or blurred; if it is elevated or if it is too deeply cupped.

The retinal vessels are examined for evidence of hyperpiesis and arteriosclerosis. The most striking early evidence is the apparent obliteration of a vein where it is crossed by an artery. Distally from this point the vein may be more engorged. All the veins may appear more distended and tortuous than normal. The venules may be brought out more distinctly and some have a cork-screw appearance.

The arteries first show increase in the central light streak. Later they become irregular in diameter, having constricted and dilated portions. There may be retinal hemorrhages, usually small petechial or flame shaped, but sometimes large sub-hyaloid. The arteries may become uniformly contracted and there may be

white streaks along the walls. In advanced sclerosis, the arteries become thread like, the lumen is obliterated and there is atrophy of the retina and blindness.

Deposits in the retina are toxic in origin. In albuminuria there are large irregular white splotches. Especially characteristic is the radial arrangement of these deposits in the macular region.

The majority of cases of albuminuric retinitis die within two years. Some live longer and a few recover. If the kidney improves, the retina may improve also. The prognosis is unfavorable in chronic nephritis, more favorable in acute nephritis and most favorable in albuminuria of pregnancy. When to the picture of retinal arterio-sclerosis is later added that of albuminuric retinitis, the prognosis is bad. Choroiditis, retinitis pigmentosa and other diseases may be found during the examination of the fundus.

Perimetry is not done unless the history and other findings suggest it. It is of value in early glaucoma, optic nerve inflammation and atrophy, brain tumor, and cerebral hemorrhage and abscess.

Let us now briefly consider advice and treatment. Some of these patients need to be referred to the general physician. Some need attention to the nose and throat. Some need treatment of the eyes. Many are greatly helped by fitting with glasses.

Astigmatism should be corrected as exactly as possible. Hyperopia of .25 or .50 D. is probably a more normal refraction than zero. Therefore, hyperopia should usually be slightly under corrected. A full correction should be given if the patient has convergent strabismus or esophoria or will use the glasses entirely for near work.

In patients with rather high degrees of hyperopia, when there is considerable difference between the static and the dynamic refraction, only a little more than the dynamic refraction should be prescribed, else the glasses may be too blurred and uncomfortable. If possible, glasses should be prescribed which give

immediate comfort and satisfaction and do not have to be followed up by explanation or argument.

Care should be taken not to over correct myopia since the ciliary muscle is weaker than in hyperopic eyes. In high or progressive myopia it is best to under correct two or three diopters. These eyes are pathologic and should be kept at rest as much as possible. The patients should be advised to get out doors to have the general health looked after, and to have suspicious tonsils and infected teeth removed.

Exophoria and convergence weakness usually respond to convergence training—pencil exercises at home and prism exercises at the office. Hyperopia should be under corrected, myopia fully corrected. Rarely, prisms, base in, have to be used in the glasses.

Hyperphoria, if more than two or three degrees, may cause symptoms which require the wearing of a vertical prism to neutralize about half of the imbalance.

The eye examination should be repeated every two years or less, depending on the findings and symptoms. The refractive error is liable to change, making a change in lenses necessary. An unduly great change in refraction is suspicious of ocular or systemic disease, present or impending. Often the first sign of disease is discovered during the eye examination.

If pathology is found, subsequent examinations give opportunity for observing its progress.

The periodic eye examination is really a health examination and is a means of increasing comfort and efficiency, conserving sight and health and prolonging life.

DISCUSSION

Dr. H. M. Bell (Vicksburg): This is a paper that brings us our bread and butter. I guess you all know that. To the young men I do not think there is very much chance of telling how to fit glasses. It just seems to work in, something that we gain by long experience. The older we get the deeper the rut gets, and we generally get to doing it just so and so and get along all right.

One of the first cases I had a run in with was a good lady about 50 years old. She was hyperopic in one eye and myopic in the other eye. She fitted her glasses at Kress' wearing a plus one. She could see in the distance perfectly; she could read or drive. She did it with one eye in one instance, and the other eye in the other instance. I fitted her and she told me afterwards that I was a very poor fitter, and she went back to Kress and has stayed there ever since.

I recall another patient in recent years. Each eye is a plus one with a plus one and a half cylinder. He can see 20/15 easily. Put these glasses on him and he cannot get out of my office. Put the cylinder axis 15 degrees off 180 and he wears them perfectly comfortably. You have got to fit the glasses and make them comfortable or you haven't done the job. Another type of case that has caused me a great deal of worry and cost me a great deal of money is the presbyope who develops a 50 to 75 cylinder, axis 180. You put it on and about nine-tenths of them will come back fussing, and you have to give them another pair of glasses. If it happens to be a pair of kryptoks and you do your own dispensing you have had a bad day.

The most satisfactory patients that I fit glasses to are the young school kids. It is done by slip shod methods in most cases. They usually have a hyperopia of 1 or 1.25. You give them a plus .75 sphere. They wear it and their symptoms are all relieved. They do not need glasses any way, but they will wear them a year or two and throw them away and they are cured. There is no further come-back. The real fitting of glasses of course in young people should be done with atropine. I have not much respect for homatropine. I use it sometimes. I still have a few patients who have to come to me. I have one patient who wears a half degree prism vertical. She is perfectly comfortable with it, without it she is not. Little things like that come up in the fitting of glasses every day, and you have to watch your step and do it the best you can and get by.

The doctor spoke of a ten inch test. I can not agree with him about that. If I give glasses for reading 10 inches I have to give another pair also. I tried to wear a pair myself and my eyes are most accommodating, but I can not bend my neck and my back when I want to see a thing on my desk that is 15 inches away.

Dr. W. A. Johns (Corinth): Dr. Stevens has covered this subject so well that there is little to add and much to confirm. The principal value of an ophthalmologist's over an optician's or optometrist's examination is in the detection of a disease or pathology or accompanying the error of refraction.

My observation has been that small errors of

refraction cause most of the headaches, pain and discomfort. With large errors the patients complaint is, that he can't see well. Unequal size of pupils is often due to tuberculosis. Loss of accommodative power makes me think at once of tuberculosis, diabetes, diphtheria and focal infections. Patients in middle life to old age will frequently complain of blurring and smoky vision where you can detect no pathology and later learn it was early softening of the lens or an attack of glaucoma. Have you noticed that in the negro you seldom see glaucoma till the eye is lost or nearly so?

I use homatropine, 1 per cent, one drop in eyes every 5 minutes for ten times. I have often found it did not paralyze the accommodation and would have to use atropine. I have found much trouble with patients 35 to 38 years of age in trying to fit without a mydriatic at first examination. Their eyes would not stay put, would accept one lens and then another. After a mydriatic I would find hyperopia of from plus-2 to plus-4 diopters. I do not understand why many young people with plus-1 hyperopia will suffer headaches and eye strain when others with plus-2.50 will go nearly to middle life with good vision and comfort. The proof is that plus-50 or plus-75 correction relieves the first class, while the other class do not call for help till near 35 years of age. Of great importance in every case is that the frame has proper pupil distance and holds the lenses in right position before the eyes.

Dr. Roy Wilkins (Clarksdale): I know a whole lot about refraction. Sounds funny, doesn't it? I believe I know a whole lot about it because I know I know nothing about it. Within the last couple of months I have been going over one little case. I had a little youngster referred to me by the school because he had some error in his vision. The kid is chronically constipated. I went over him, got as near a correction as I could by home treatment. I thereupon examined him and got a plus 2.26 sphere in his right eye and a plus 50 sphere in the other eye. I wonder why it was. It was something that did not look like that, but that was my refraction with all three tests. We took that kid and put him on a limited diet, restricted diet for about 15 days. He came back and I found him with a plus 50 sphere in his left eye and a minus 25 sphere in his right eye. He said he did not need glasses. I went on and in about 3 weeks on his normal diet I went over him again and he comes up absolutely normal after he has gone through a 15 day diet. I hope Dr. Stevens will bring out just a word about frame fitting. I believe it is one of the very important parts of refraction.

Dr. Stevens (closing): Replying to Dr. Bell about the near point, I was referring especially to early presbyopia. If a patient can not get a

punctum proximum of ten or eleven inches, he needs help.

I agree that the fitting of frames is one of the most important parts of fitting glasses, and it is about the most difficult part to me. I think it is a great pity that we do not have an expert frame fitter. About all we can do is to see that we have a glass comfortable, and have the pupil distance correct. After all, I think, as I said before, the most important part of refraction is the finding of systemic trouble.

WHAT THE LAYMAN SHOULD KNOW ABOUT CANCER

HUGH SHANE, M. D.

MARSHALL, TEXAS

There is just one thing that we really know about cancer: It kills.

We know something of the cause of cancer, though the cause is still debatable, and each man echoes the other's theories or advocates his own, only too frequently without sufficient study. We know how to cure cancer, that is, we know that many cases can be cured if the treatment is begun promptly enough, but we do not know how to get people to come for treatment when their cancerous growths are small enough to be cured by the means we have at hand. The chief thing we know about the cure of cancer is that early treatment is the only successful treatment.

With man's ignorance we shall always have to contend. It explains why the death rate of cancer amounts to nearly 10 per cent of the entire population. It explains why its frequency is steadily increasing. It explains why during the past 15 years the increase for males was 47 per cent and the increase for females was 21 per cent. Part of the explanation, of course, is that our means of diagnosis are improving and that the span of life is increasing, so that more cases are being reported correctly and more people are reaching the cancer period of life. But the true explanation of the mortality rates is that people are not coming to see doctors early enough for their disease to be cured.

Cancer is a growth of abnormal cells

that multiply, that invade and destroy normal tissues, and that by means of lymph and blood channels transport parts of themselves to other parts of the body, where they grow, multiply, invade and destroy normal tissues and transport parts of themselves elsewhere, the process continuing until the death of the host. It is only when the cancerous growth has been removed by surgery or destroyed by radium before it has transported itself to other parts of the body that any hope of cure can be given. If, however, it is treated in the early stages by the proper means and in the proper hands, a large majority of cases can be permanently cured.

Please don't forget that. If you wait to be treated until after the cancer has transported itself to other parts of the body—and it does not, as a rule, wait very long to transport itself—then your only hope of a cure is to invoke one of God's miracles. There are very few cases in which anything else will avail.

East meets West in cancer and North meets South. Every race has the disease, with the possible exception of the pure American Indian. Northern Europeans have more cancer than Southern Europeans, and it is likely that race plays some part in the incidence. J. L. Maxwell's comparative figures for China and Chicago show marked differences. In the group that he studied there was an 18 per cent incidence of breast cancer in China, as compared to 8 per cent in Chicago; a 14 per cent incidence of cancer of the male external genitalia in China as compared to .2 per cent in Chicago; and a 7 per cent incidence of skin cancer in China as compared to a .4 per cent incidence in Chicago.

Males have cancer of the mouth, tongue, stomach, gullet, larynx and large bowel more frequently than do females. The most frequent site of cancer in the female is the womb and the breast, although no part of the body is exempt.

Age is important. Cancer can occur before 30 years of age, though it is not usual.

After 35 years the peak mounts gradually upward, but it is wrong and foolish to classify it specifically as a disease of old age.

Chronic irritation and heredity are the two theories which are given most prominence today. Cancer is neither contagious nor infectious. Secondary infection is important only from the standpoint of keeping irritated places from healing properly, and in that respect it assumes the importance of chronic irritation. Anything that irritates any tissue long enough predisposes to cancer. The womb, the breast, the stomach, the bowel, the gullet, the lower lip, and the face, because they are frequent sites of chronic irritation, are also the most frequent sites of cancer.

Whether heredity is the real cause of cancer or is simply a predisposing factor is still a matter of debate. The majority of authorities accept the latter view. Like black sheep, cancer follows the parade of progeny, not necessarily occurring in every generation, but bound to show up sooner or later. Maud Slye, who has made an extensive study of the hereditary factor, reports: "There are apparently two factors necessary to produce cancer. If either of them could be wholly avoided, it might be possible to prevent it. They are (1) an inherited local susceptibility to the disease, and (2) irritation of the appropriate kind and the appropriate degree applied to the cancer susceptible tissues."

Different cancers have different degrees of malignancy. Dr. A. C. Broders has developed an ingenious method of determining the degree of malignancy of every growth by estimating the degree in which the cell differs from the normal cell. The more different it is, the more malignancy it exhibits. There are four grades: Grade 4 is the most fatal, giving barely 10 per cent of five year cures, while grade 1 is the most favorable, giving 90 per cent or more of cures. The higher or more fatal grades are more usually, though not invariably, found in the neck of the womb, the tonsils, the gullet, the stomach and the lungs. The

lower grades of malignancy are more usually found in the colon, the body of the womb, the thyroid, the lips, and possibly the urinary bladder and the prostate. Of course this does not mean that growths in these special locations are always of the same grade of malignancy; any grade can occur anywhere, but these findings are the more usual.

We have, unfortunately, only indefinite ways of detecting cancer in its very early stages. Dr. Alton Ochsner has an excellent way of expressing it. Ordinarily, he says, we are not conscious that we have a stomach, a colon or any other organ; when we become conscious of any of our organs, and when we are in the cancer period of life, then is the time to suspect cancer and to keep on suspecting it until it is definitely ruled out. If you are over 30 years of age, for instance, and you become conscious of your stomach through continued indigestion; if you become conscious of your colon through constipation, bloody stools or diarrhea; if you have a sore on the lip that does not heal within a week or 10 days; if you find a lump in the breast (and every woman should inspect her breasts monthly after 30 years for lumps, which are frequently undetected until they are very large); if you have an unusual discharge from the womb; in short, if you exhibit any unusual symptom, then see an intelligent physician without loss of time. If anything happens to direct your attention to any organ that cannot be explained normally, that has not a definite, traceable cause, especially if the condition does not clear up within at least 10 days, then, for your life's sake, see an intelligent physician, especially if you have ever heard of cancer in any of your relatives. Don't wait for pain to develop. Pain precedes death; when it develops, it is usually too late for cure. Do not believe that bleeding is normal with "the change of life." It is always abnormal, especially if it is preceded or accompanied by a whitish discharge.

Avoid the physician who treats you with

salves. Insist on thorough examinations. Remember that internal sites require roentgen ray study, and that external sites, especially the breast, and some internal sites demand removal of tissue for microscopic study.

The prevention of cancer is the best way of treating it. The advocates of the hereditary theory, with whom I am inclined to side, say that for your children's sake you should not marry into a cancerous family. On the other hand, many men, equally well versed in cancer, do not advocate this policy. Anyway, if you have your choice of marrying into a cancerous and into a non-cancerous family, why not take the latter? There is too great a risk that cancer is at least partially inherited.

Those who believe that chronic irritation is the primary cause of cancer emphasize other things. Live a sane, hygienic life. Keep yourself healthy. Avoid bad habits, or break them if you have them. Keep the mouth clean and the teeth in good condition; Ewing and others give the excessive use of tobacco as the cause of lip and mouth cancer. If you have any whitish plaques on the lip or in the mouth, have them investigated. Keep the body clean, especially the external genitals. Circumcision is recommended. Watch moles or warts, and if they are exposed to frequent trauma and irritation—as they usually are on the face and on certain other parts of the body—have them removed. Have childbirth injuries repaired promptly, and be careful to avoid infection of the neck of the womb, no matter how it is caused. Keep the breasts clean. Have both breasts suckled, avoid stasis of milk, and do not let one or the other remain useless until the baby is weaned. Such instances could be multiplied, but it is not necessary to continue with them; you yourself should be able to tell just where in your body you have sources of chronic irritation. If you must keep chronic irritation with you, then also keep both your eyes on it. If it changes character, if it gets larger, then for your

life's sake, see an intelligent physician at once.

Inform yourself of the facts of cancer, and remember them especially if you are over 30 years of age. You can obtain information from the newspapers. You can obtain all the information you need from the American Society for the Control of Cancer. You can obtain information in the best form from your family physician. And you are not likely to develop cancer or to die of it if you will seek him promptly when you develop an unusual condition on your body or an unusual disturbance in any of your organs, for while cancer, as I said in the beginning of this paper, always kills, it seldom kills the people who are on the look-out for its development and who take it in time.

CHINESE MEDICINE*

R. B. PRICE, M. D.

TAICHOW KU, CHINA.

There is no doubt that the Chinese are among the most ancient of the civilized races of the world, and in the old days they were perhaps leaders in medicine and surgery after the Egyptians. The Nuei Ching is the oldest medical classic in China. The authorship of this book, written on bamboo slips, is uncertain but it is known to have been written at least 3300 years ago though some claim it to have been written by Huang Ti which would make its date about 5000 years ago.

According to the Nuei Ching there are four standard methods of diagnosis, namely: observation, auscultation, interrogation, and palpation. Observation means to note the complexion and expression of the face; auscultation to listen to the voice and sound; interrogation to inquire into the history, symptoms and cause of the illness, and the condition of the appetite and excretions; palpation to examine the pulse. The classic says, "to know by observation is

*Read before the Central Medical Society, Jackson, June 21, 1932.

sublime, by auscultation wonderful, by interrogation skilful, by palpation art." The Thousand Golden Remedies states, "The skilful doctor knows what is wrong by observation alone, the middling doctor by listening and the inferior doctor by feeling the pulse."

The greatest importance is attached to the doctrine of the pulse and it is universally believed that all internal diseases can be revealed by this method alone. In 255 B. C. Pien Chiao promulgated this idea and in A. D. 280 Wang Shu Ho wrote the Pulse Classic in ten volumes. In order to properly evaluate the pulse it is necessary to know two other doctrines which form the basis of Chinese medicine. These are the Yang and the Ying, i. e., two principles male and female, heaven and earth, life and death, day and night, heat and cold, positive and negative, strong and weak, acid and base, etc., corresponding to the even and odd of Pythagoras, Osiris, and Isis of the Egyptians.

The second doctrine is the five elements—metal, wood, water, fire and earth. The human body is believed to be made up of a harmonious mixture of these elements in the lungs, liver, kidney, heart, and spleen, and they are also related to the five atmospheric conditions—drought, wind, cold, heat and moisture, the five planets—Venus, Jupiter, Mercury, Mars, and Saturn, the five colors—white, green, black, red and yellow, the five tastes—pungent, sour, salt, bitter, sweet, the five musical tones, etc. Health depends upon the proper equilibrium of the male and female principles and on the right proportion of the elements. Any derangement of this balance causes disease which manifests itself in the circulation.

Chinese pulse lore is very complicated. The examination is made on both the right and left wrists, the physician using his left hand for the right wrist and his right hand for the left wrist. The best time for taking the pulse is at sunrise. The physician should keep cool and collected first noting if his own breathing is in order, one inspiration and one expiration constituting

one cycle of respiration. The normal ratio is four beats to one respiration.

The extent of the pulse is one and one-tenth inches and is divided into three parts, the tsun or inch; the bar(kuan) and ch'ih or cubit. Each of these has two distinct phases, internal and external, making altogether 12 pulses, six on the right and six on the left hand. And each of these 12 pulses correlates with 12 internal organs the normal or abnormal condition of which it betrays. The pulse under the bar corresponds on the right to the condition of the spleen and stomach, on the left to the liver and gall bladder. The pulse felt on the right cubit shows the condition of the Gate of Life (G. U.), on the left cubit it tells the state of the kidney and bladder, etc., etc.

There are four principal pulses, Fu superficial like a piece of wood floating on the water, deep like a stone thrown into the water, slow and quick. These main divisions have many sub-divisions, *e. g.*, slippery like pebbles rolling in a basin, small like scraping bamboo with a knife, empty, full, long, short, overflowing, thready, tense, tardy like willow branches swaying in a light breeze, taut like a musical string, hard like touching the surface of a drum, soft like thread floating on the water, scattered like willow flowers scattering with the wind, etc., etc.,

INDICATIONS OF THE PULSE

The fu pulse (superficial) belongs to the yang or male principle and indicates disease caused by wind, cold, dampness, heat, dryness and fire. If superficial and strong, it denotes wind and heat; if superficial and weak, deficiency of blood; if slow, it means external chills, if quick, wind and fever. A combination of the signs superficial and soft denotes sun stroke; superficial and hollow, hemorrhages; superficial and overflowing, weakness and fire; superficial and thready, fatigue through overwork; superficial and small, seminal weakness. superficial and scattered, exhaustion and collapse; superficial and slippery, wind and phlegm.

A deep pulse belongs to the yin or female principle. It indicates external disease due to the seven passions—joy, anger, anxiety, worry, grief, fear and shock. If the pulse is deep and slow there is weakness and cold; deep and quick, latent heat. If tense it means colic due to chills; if tardy, accumulation due to water. A deep and slippery pulse points to indigestion; a deep and hidden pulse signifies vomiting and diarrhea.

Prognosis is also based on the pulse. In apoplexy if the pulse is superficial and slow recovery is the rule. If firm, rapid and large, there is danger. In typhoid superficial, full and overflowing pulse means recovery. If small, thready and soft the prognosis is bad. In diarrhea a small deep slippery and feeble pulse gives a good prognosis. If strong, large, superficial and quick, the prognosis is bad. One should not be alarmed to find an irregular pulse in cholera. It is only when this sign is combined with a curled tongue and shrivelled testicles that recovery is improbable.

There are nine kinds of pain in the abdomen. A slender and slow pulse indicates recovery.

In disease caused by evil spirits the pulse varies in the two wrists. Where obnoxious influences exist and the belly swells up a tense and fine pulse is curable; a large and superficial pulse is fatal.

According to Chinese anatomy the internal organs are divided into five Tsangs or solid organs—heart, liver, lungs, spleen, kidneys and six fus or hollow viscera—gall bladder, stomach, large intestine, small intestine and the urethra. The function of the organ is to store up, while that of the viscera is to eliminate. The Chi'h or slow pulse reveals the condition of the organs and the Shu or quick pulse tells the condition of the viscera.

British and other foreigners in China consider the pulse lore of the Chinese physician as "downright and solemn quackery." But Dr. K. Chimin Wang, chief medical officer of the Shanghai

Hangchow-Ningpo Railroad, whose article has furnished me the information herewith set forth on the pulse, believes that there has been some valuable information accumulated during the forty centuries the Chinese have used their eyes and ears and fingers in the diagnosis and prognosis of disease.

The Nuei Ching also contains some excellent notes on leprosy, written 3300 years ago, as follows:

1. Those suffering from leprosy, ta'Feng, have stiff joints, the eyebrows and beard fall out.

2. The wind scatters through the muscles and comes in to conflict with the wei chi or defensive force. The channels being clogged, the flesh becomes nodular and ulcerates. And because of the stagnant movements of this defensive force numbness results.

3. The vital spirits degenerate and turn cloudy causing the bridge of the nose to change color and rot and the skin to ulcerate. The wind and chills lodge in the blood vessels and cannot be got rid of.

4. For treatment prick the swollen parts with a sharp needle, let the foul air out until the swelling subsides.

Chaulmoogra oil was first mentioned in the treatment of leprosy in China in the fourteenth century.

Works on surgery and obstetrics were written in China as early as the year 620 A. D. About 1250 A. D. observations were made on the post-mortem examinations of women and this note is quoted by Dr. Maxwell: "If the body of a pregnant woman who has been murdered or has died during labor is buried, after a few days the baby may be born, the joints of the woman having been loosened."

Chinese medical knowledge compared very favorably with that of other countries in ancient times, but the trouble with Chinese physicians is that they have stood still while the rest of the world moved on. All the development of Western medicine in China has been accomplished by

foreigners and the Chinese students they have trained.

Now one might think that if an American physician went to an interior city in China, as I did, and announced that he was ready to treat disease in a new and better way that he would at once be over-run with patients. Such was not my experience. Though the Chinese in Taichow had never read Hamlet still they had his idea that it was better to bear those ills they had than fly to those they knew not of. They asked me questions: "If you are so good why did you move?" "If your medicine is so fine why do you sell it so cheap?" I found myself beset on every side with enemies who spread propaganda against the new system. They said that we would dig out the eyes of the people in order to get the jewels therein for sale, that we would cut out people's hearts to make foreign medicine. Many and varied were the blood curdling tales that went around, and we soon realized that we would have to prove our worth before we could hope to establish a business. It was a slow process. Many came to us that we could not cure and we would hear folks say, "Yes, yes. We told you so."

Another case that gave us some advertisement was a strangulated hernia of ten days standing. The patient appeared almost moribund but we decided at least to open him up. The gut was black and would have been gangrenous, I am sure, in a white man but we finally returned it to the abdomen and closed him up. He made an uneventful recovery.

A woman with a large dermoid cyst of the ovary waited for the delivery of her baby until she grew weary of life so she came to be killed or cured. When she went back to her village well she exhibited herself to all who were curious and as a result one morning five women led by a

diminutive grandma appeared at the hospital. When I asked them what they wanted the old lady made a sweeping gesture along her abdomen from the ensiform cartilage to the pubis. I repeated my question and she repeated her gesture. After I insisted that she must tell what she wanted she said, "We want to be cut open. We want you to look around inside us and fix anything that is out of order so that we can all feel good like that other woman." The only diagnosis that we could make was hook worm and we offered to treat them for that but they went home. Nothing but a laparotomy would suit them.

Little by little we have been able to convince the people of Taichow that we have a better way than theirs so that after sixteen years we have won a place in the life of the community. Of course, all the people do not come to us but most of them have us in mind as a last resort.

Some doctors say they would not do medical missionary work. Well, there are reasons for this opinion. Living in China as a missionary doctor takes away opportunities for development; it destroys the chance to make money and reputation; it separates one from relatives and friends. But there is a satisfaction in the work. The medical missionary heals those who have no other hope and more, he aids in establishing a new system of medicine in the place of superstition, witchcraft, and ignorance. Along with others he is opposing the advance of communism which, if it ever wins in China, may sweep all over Asia and bring the dark ages back to Europe and the world. Greatest of all the tasks of the medical missionary is the one of helping make Christianity known to a nation now living in heathen darkness. This work may even be of some benefit to our own land, for General Douglas Haig said that Christianity was the sole hope of world peace.

CASE REPORTS AND CLINICAL SUGGESTIONS

RECOVERY FROM INFANTILE PARALYSIS FOLLOWING MALARIAL PAROXYSMS

CASE REPORT

J. E. KNIGHTON, M. D.

SHREVEPORT, LA.

In view of the frequent occurrence in medical literature during recent years of favorable results being obtained in cases of paresis by malarial infection, it has occurred to me that the following case report might be of interest.

The patient, aged 13 years, female, white, was admitted to the Tri-State Hospital, of Shreveport, Louisiana, on December 24, 1930.

Three days before admission, she became ill, complaining of aching limbs and back, and rather severe headache, and slight elevation of temperature. On the second day of the illness she was seen by Dr. Keator of Bermuda, who found the above symptoms somewhat more pronounced and the physical examination showed rather marked soreness and rigidity of the muscles of the neck. No paralysis was noted at that time. She was referred to the hospital for further observation.

Physical examination showed a well developed and well nourished child. The interesting features of the examination were as follows:

The head was drawn backward and the muscles of the neck were quite rigid. The pupils were rather markedly dilated but reacted promptly to light. The chest showed nothing abnormal. The abdominal organs were not palpable nor did percussion reveal any increased dullness over spleen or liver. There was no marked rigidity of the muscles of the abdomen. The upper limbs showed no impairment of power or motion, and the reflexes were normal. There was almost complete loss of power in the lower limbs and sensation was definitely impaired. The knee jerk was present but feeble. This was completely absent the following day. There was no ankle clonus.

Rectal and vesicle sphincters were involved as indicated by inability to retain fluids by enema and retention of the urine.

Laboratory examinations showed the following: Urine, rather heavy trace of albumen, few pus cells and an occasional granular cast. The white blood count was 13,350, neutrophils were 75 per cent, small lymphocytes 22 and large 3. Spinal fluid showed a cell count of 439, there being 419 lymphocytes and 20 polynuclears. There was

a marked increase in globulin. The smear was negative for organisms and the culture was sterile. Wassermann test was negative.

Patient was kept at complete rest under the influence of bromides. The rigidity of the neck gradually disappeared and the elevation of temperature subsided within a few days.

She was permitted to return home on the twelfth day after admission with general condition good, but the paralysis of both lower limbs was complete and she was still unable to void the urine.

A follow up report was to the effect that the condition remained practically unchanged for about six weeks. At this time she had a severe chill which was followed by high temperature. The doctor in charge regarded this as a malarial paroxysm as the family lived in a locality where malaria was endemic and one or two other members of the family had similar paroxysms at the same time. No blood examinations were made but the symptoms subsided under the administration of quinine. However, the patient under consideration had repeated paroxysms on the seventh and fourteenth days, but under vigorous anti-malarial treatment there was no recurrence after that date.

The most interesting feature in connection with the case, is that soon after the first malarial paroxysm, the paralysis began to improve and within ten days after this initial chill and high temperature, the recovery was practically complete.

I had the privilege of examining the child on April 1, 1931. At this time there was no remaining evidence of paralysis. The muscular tone was good, sensation was normal, there was normal control of bladder and bowels, and the reflexes were normal.

Subsequent reports are to the effect that she has remained free from any of the usual sequelae of acute poliomyelitis.

The following questions may suggest themselves:

1. Was recovery due to the malarial infection acting in some specific manner, or would the same results have been obtained by any other agent which would have caused high temperature?

2. Did the administration of quinine produce the results?

3. Was this simply one of the rare cases in which a complete spontaneous recovery occurs?

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MEDICAL NEWS

The letter that is published in the Louisiana section of the journal addressed to the Parish and District Secretaries and written by Dr. Talbot, Secretary-Treasurer of the Louisiana State Medical Society, is of such pertinent value that we cannot forbear commenting on it. Dr. Talbot points out very accurately that the cohesiveness and binding together of the medical profession is in good part maintained by knowl-

edge of what the men are doing in the profession as a whole. This applies not only to their scientific attainments, to scientific writings and to hospital meetings, but also to the more personal relationships of life. If it is known that so and so is doing this or that, a closer bond is forged when it is realized that what one man is doing or what groups are doing can be duplicated elsewhere with a consequent advancement of scientific medicine or social medicine.

By the same token, speaking from a more or less selfish point of view, the reporting of the medical, personal and social activities of a group enhances the value of a medical journal or of any publication which combines science with news. We have no doubt but that the Mississippi section of this journal is turned to first when the Mississippi doctor tears off the wrapper of the magazine. Dr. Lippincott has been doing splendid work in Mississippi and has stimulated and aroused his correspondents so that they are reporting the activities of their medical communities and letting the other fellow know what is going on in their region. As a matter of fact Dr. Lippincott's section is commented upon favorably by medical editors throughout the country and is held as a standard of what is being done and can be done in this line of medical reporting. It is our earnest hope and wish that Louisiana physicians who are acting as secretaries for their Parish and District Societies will cooperate and help Dr. Talbot in his endeavor to add to the interest of the Louisiana news section of the journal. A few of the secretaries send us regularly news of their meetings. They are to be thanked. Unfortunately their number is few and their contributions relatively limited.

The criticism has been made that often news in the Journal is not fresh but on the contrary has been spoiled by its tardiness in publication. This is true but it must be remembered that the journal is not a newspaper nor can current activities be reported within twenty-four hours. It takes ten days for the journal to go through the

press, for the galley proof and the page proof to be corrected and set up. This accounts for the delay in the publication of some items; on the other hand sometimes news notes are sent to us some weeks after the occurrence or the event has taken place. Subject to the limitations of the ten-day period all news matter is published as soon as it is received and appears in the next succeeding number of the journal.

UNITED STATES MORBIDITY REGISTRATION

There has been proposed the registration of sickness throughout the United States. This morbidity registration will correspond to the weekly health index of deaths in the United States registration area, issued by the Department of Commerce. Publication of such statistics will be of great value to health officers, and will be of interest and well worth while for the practitioner of medicine.

The United States Public Health Service has rated the various state morbidity reports now issued and has seen fit at present to qualify only twenty-six of the forty-eight states in the Union. The failure of the remaining states is due to the incomplete reporting of the so-called reportable diseases. The standard upon which it was judged that reporting was incomplete, is the ratio between the number of deaths to the number of cases. In other words, it is conceived that for every 106 cases of measles there will be one death, or one death of scarlet fever for every 78 cases reported, and one death for each 11 cases of diphtheria. These minimum ratios, in order to qualify, are to extend over a three-year period. The logic of this method of computing accuracy of morbidity reports is open to question. It takes into account the fact that all deaths are reported, and then assumes that for each death there will have to be a certain number of patients who will get well. Of course these standards are not high, but do afford a working basis upon which to judge the accuracy of the reporting of con-

tagious diseases. Incidentally, in those states in which the registration is conceded to be reasonably thorough, the individual physician is entirely responsible. In the states that do not have acceptable morbidity statistics, it is safe to assume that there is considerable laxity in the reporting of those diseases which are classified as reportable. The doctors of Mississippi and Louisiana should note this and should be extremely punctilious in the reporting of those diseases which the State Boards of Health require notification.

TREATMENT OF LEAD POISONING

One of the very fascinating results of the study of lead poisoning by Aub and his associates was the development of a method of treatment of acute plumbism which has been found of extreme value. Acting on the supposition that lead is deposited in the bones in the same manner as lime salts, the individual with acute lead poisoning is found to react almost miraculously in the relief of pain, by the slow injection of 10 c.c. of sterile five per cent solution of calcium chloride, the lead being deposited with the calcium in the osseous system. With the subsidence of the acute symptoms the de-leading of the patient's bones is begun with a diet low in calcium, and which should not include any milk and only these vegetables and fruits: tomatoes, corn, potatoes, apples, and bananas. The elimination of lead proceeds rapidly as the calcium and lead are pulled from the bone when the negative calcium balance is established.

The correlation of data obtained in experimental investigations sometimes seems almost miraculous. Shelling* says that it has been shown that in experimental rickets a diet containing too much or too little calcium will result in rickets unless the ratio of the calcium to the phosphorous is about 1:1. The fact that occasionally the

*Shelling, David H.: Effect of Dietary Calcium and Phosphorous on Toxicity of Lead in the Rat: Rationale of Phosphate Therapy. Proceedings of the Society of Experimental Biology and Medicine, 30:248, 1932.

deleading of individuals with lead poisoning is not satisfactory, can be explained upon the fact that calcium may be given in the form of salts without sufficient phosphorous. If ample phosphorous is not given, as in rickets so in plumbism the lead can not be eliminated as an insoluble phosphate, nor can the lead be deposited in the bone unless there is a sufficient amount of phosphate present. Shelling has proven this beautifully in a series of experiments with rats poisoned with lead carbonate, and the

application of his results confirm Aub's idea concerning the treatment of lead poisoning but under a somewhat different mechanism. Aub's diet contains a sufficient amount of phosphate to make insoluble salts of calcium and lead, but others, who have not appreciated the importance of the phosphorous factor in the deposition and the secretion of lead, have given calcium salts without sufficient amount of phosphorous and have not had the anticipated satisfactory results.

HOSPITAL STAFF TRANSACTIONS

CHARITY HOSPITAL VISITING STAFF MEDICAL SECTION

The regular meeting of December 20, 1932, was called to order by the chairman and routine business was dispensed with; also the program and case presentations.

Upon motion of Dr. Ralph Hopkins, seconded by Dr. Amedee Granger, resolutions as follows were adopted by the Medical Section and spread upon these minutes, with the direction that a facsimile of this page be forwarded to the mother of our confrere, Dr. Henry Daspit, and through her communicated to his other surviving relatives:

WHEREAS, the Creator, in His infinite wisdom, has seen fit to remove from our midst our esteemed friend and colleague, Dr. Henry Daspit, and;

WHEREAS, we of the Medical Staff of the Charity Hospital of Louisiana, who survive him shall be deprived of his kindly help and guidance;

THEREFORE, be it resolved—that we make this expression of our bereavement, with instructions to the Secretary that a copy be spread upon these minutes and that a facsimile of this page be sent to his mother.

Upon motion of Dr. Suzanne Schaefer, seconded by Dr. A. L. Levin, the meeting was unanimously adjourned in tribute to our departed friend.

Morris Shushan, M.D.,
Secretary.

W. A. Love, M.D.,
Chairman.

CHARITY HOSPITAL MEDICAL STAFF MEETING

On January 7, 1933, Dr. Love presided at the regular monthly meeting of the Medical Section of the Charity Hospital Staff. Dr. Howell demonstrated a case of dermatitis diagnosed as mycosis fungoides. While not typical clinically, a biopsy

had shown the characteristic pathology of the condition. The microscopic slide of the biopsy was shown by Dr. Von Haam. Dr. Howell also showed a patient with erythema multiforme, and one of juvenile pemphigus. The presentation was discussed by Dr. Roussel.

Dr. Wirth showed a case in which a clinical diagnosis of carcinoma of the stomach with metastasis to the liver had been made. Clinical laboratory and roentgenological findings supported this diagnosis, although the roentgenological findings presented some peculiarities. In addition there was a question of systemic syphilis, and the additional clinical diagnosis of chronic nephritis, arteriosclerotic heart disease with decompensation, and aortitis. Dr. Miles discussed the roentgenograms and gave his impression that there was a carcinoma on the posterior wall of the stomach in the prepyloric region, probably with a polypoid mass extending into the cavity of the stomach. Dr. Granger stated that he thought the mass might be retroperitoneal, and not in the wall of the stomach itself.

Dr. M. W. Miller showed a patient with amebic dysentery. This negro male also had definite gastric symptoms suggesting peptic ulcer. No gastric intestinal series had been reported upon as yet, so that the question was still undecided.

Dr. Hobson presented a case of pellagra, which, while giving a very typical history of the disease, including a period of mental confusion, did not show very typical skin lesions.

There then followed a presentation of gross and microscopic specimens by Dr. Von Haam. Among these were included a case of acromegaly, melanocarcinoma with marked metastasis including to the brain; pyelophlebitis of the colonic mesentery; single myeloma of the vertebra; and carcinoma of the esophagus.

Willard R. Wirth, M.D.

HOTEL DIEU

The staff of Hotel Dieu met on December 21, 1932, with the President, Dr. Joseph A. Danna, in the chair, and the Secretary, Dr. Julius E. Isaacson, at the desk.

Dr. A. Mattes presented a paper on "Transurethral Treatment of Prostatic Hypertrophy." The conditions of the prostate were classified. This was followed by a description of the type of instruments used, from the original one devised by Amussat in 1836, that by Bottini in 1873, by Guthrie in 1834, by Young in 1909, up to the present day instrument. This paper reviewed the literature dealing with the subject by leading authorities in America, citing their technique.

Case reports, with an analysis of three deaths followed.

Dr. Mattes closed with the following remarks: "Resection is as grave a procedure as any major surgical operation, and requires expert care, careful post-operative supervision, and no handling of catheters by patient or intern. Infection within forty-eight to seventy-two hours post-operatively usually means death if resection has been extensive or the bladder foul. The value of this procedure has been attested to by many. The method is here to stay. Let us study our cases more closely and apply the simplest treatment for present drainage, forgetting the method of attack."

Dr. R. Gordon, discussing this paper, said: The ideal type for resecting is, of course, the median lobe; the Davis-Bovie unit with the McCarthy electrotome is probably the best instrument. The so-called senile sclerotic prostates, (the small fibrous prostates which are almost impossible to enucleate) and some types of malignancy, along with prostatic bars, are ideal for the use of this type of instrument.

It is necessary to stop resection when you see the veru-montanum. In the case of neoplasms and the other types of obstruction, I have mentioned, with this instrument it would be perfectly feasible to cut a channel through; but with the large prostates, of which I had one case weighing 4½ oz., filling almost half the bladder,—this type of instrument is useless. The rectum may be entered, or the bladder may be cut if the proper precautions are not taken, along with injury to the vera and sphincter. What occurs most often is lack of control of urine afterward.

This procedure should therefore be done by only a competent cystoscopist who knows just what steps to take, and the best type of instrument for each case.

Dr. Max M. Green stated: We have used this instrument on all types of prostate. The procedure (used in thirty-seven hospital cases) carried a mortality of 13½ per cent compared to 17½ per cent in ordinary two-stage prostatotomies.

Hospitalization was reduced to about half. Six of these cases required re-operation, two because of faulty instruments, and four because proper results were not obtained within two or three weeks. In this group there were four cases of incontinence, one of which has lasted four months; three have gradually recovered control of urine.

In private practice I have four cases of prostatic resection; 15 grams were removed from one, and 3 grams from each of the others. All three are getting along satisfactorily.

Second on the Scientific Program was a case of Fracture of the Pelvis presented by Dr. J. C. Menendez. This fracture occurred from a fall of forty-five feet, the man having struck his right hip on a steel shaft after falling thirty-five feet. He was confined in bed four months, with six months additional treatment. Routine fracture treatment was given. Fortunately he had no bladder complications.

The patient was declared legally to be unfit for manual or hazardous labor for the rest of his life; but one year following the accident he returned to work both laborious and hazardous. He has only an area of anesthesia over the right gluteal region, and a slight shortening of the right leg, which is compensated for by the pelvis, and a slight elevation of the shoe heel on that side; he walks practically without a limp.

X-ray pictures (taken after four years) show an upward displacement of the right innominate bone at the sacro-iliac articulation, with displacement and separation of the symphysis pubis of 3¼ inch, with spicules of bone at two points in this region. There were also fractures of the pubic bones (descending ramus).

At a recent A. C. S. meeting, 4000 cases of fractured pelvis were discussed. It was stated that, irrespective of type of fracture, with or without complicating injury to bladder, urethra, rectum or other organs, treatment is simply rest in bed with or without some fixation. Results in all cases were excellent functionally, even though apparently frightful deformities had been present. Naturally, all complications to soft parts and viscera were treated as developed.

Irrespective of the degree of deformity, these cases should not present permanent disability. Functional results are more important than anatomical positional results.

Dr. R. Gordon: In conjunction with Dr. LaNasa I treated a case at Charity in which the fracture was similar to this, except that one of the rami of the symphysis, at the time of the accident, had been severed, causing stricture of the urethra—part of the bone puncturing it.

Patient had a suprapubic tube in when he came to the hospital. Several consultations were had and the consultants decided to have him retain

the suprapubic tube, saying nothing could be done. He was getting around well. After a few weeks we did an external urethrotomy and inserted a catheter. The catheter was later removed and the urethra was perfectly healed. It is remarkable how he got around with a pelvis that bad.

Another accident case was a white girl whose bladder had been punctured by a very small spicule of bone. Cystoscopy showed only a very small puncture. A small inswelling catheter resulted in a complete recovery.

Executive session followed, and the following officers were elected and inducted into office to serve for the year 1933: Dr. P. Leonce Thibaut, president; Dr. Peter B. Salatich, vice-president; Dr. Ruth Aleman, secretary-treasurer; Laboratory, Dr. Lucien Fortier; additional members of the Board: Dr. Joseph A. Danna, Dr. Val H. Fuchs, Dr. J. E. Isaacson, Dr. Walter Otis, Dr. John Smyth, and Dr. George J. Taquino.

The meeting adjourned at 9:45 P. M.

TOURO INFIRMARY STAFF MEETING

The regular clinical meeting of the Medical Staff of Touro Infirmary was held Wednesday, January 11, 1933, at 8:00 P. M. Since the annual report was to be made and the annual election held at this meeting, only one case report was presented.

Dr. Gilbert Anderson showed a patient who had been injured in February, 1932, by a blow on the head with a falling log. The patient had been in coma for about seven weeks, and there was a depressed fracture. The patient had injury of the left third cranial nerve, and in November had a severe convulsion. Following this episode, the patient was referred to Dr. Anderson for treatment. At operation there was a large depressed area in the left frontal region, with a cyst about as large as a lemon. The bone that had been removed was replaced as a bone graft. On the fifth day the sutures were removed, and on the twelfth day the patient was about ready to go home when he suddenly began to have high fever. The wound was opened and a large quantity of thick yellow pus drained from the wound freely. This was treated conservatively, and the patient made an uneventful recovery without a loss of the bone graft. The ptosis of the left eye is still present, as is also the left fixed pupil, but the diplopia is no longer present. Dr. Landry discussed a case of epilepsy due to depressed fracture which he had operated about some years ago without any relief of the epilepsy.

Dr. Womack made a final report in the case of cerebrospinal rhinorrhea which he had previously presented to the staff. This patient failed to

return to the clinic, and after a follow-up investigation it was found that she had died in coma without fever. The exact cause of her death was, therefore, undetermined.

There then followed the annual report of the Executive Committee, prepared by the secretary and read by the chairman, Dr. Urban Maes. Among the things discussed and decided upon by the Executive Committee was the matter of holding a joint annual meeting with the Orleans Parish Medical Society, which will probably be arranged. Various other matters of interest to the staff were enumerated.

The annual election resulted in unanimous reelection of the two members to the Executive Committee.

Following the meeting, refreshments were served.

Willard R. Wirth, M. D.

STAFF MEETING OF THE MISSISSIPPI BAPTIST HOSPITAL, JACKSON

The staff of the Mississippi Baptist Hospital met January 3, at 6:30 P. M., in the dining room where a delightful meal was had. Afterwards the minutes of the previous meeting were read. Drs. Verner and Henry were proposed for membership and their names were referred to the membership committee.

The annual report of the hospital was summarized by the superintendent and was very interesting to the staff. It showed some excellent management on the part of himself. The remarkable cuts in the running expenses over the previous year were shown.

Drs. Wall, Wilde and Sheffield were the committee appointed to draw up resolutions regarding the death of the late Dr. T. J. Crofford. The resolutions were unanimously adopted.

Dr. V. D. Hagaman was accepted as a member of the staff at this time.

Dr. T. W. Kemmerer read a paper on the Kline-Young Microscopic Flocculation Test and the Wassermann Test. The paper was freely discussed by Mr. Palmerlee and Dr. Wilson.

Dr. F. E. Rehfeldt reported the treatment of five cases of tularemia by the use of metaphen in ten c.c. doses intravenously, given every other day for six doses. In five cases treated the high temperature and swollen glands all disappeared promptly on the administration of the drug and since there is very little to be found on the treatment of this disease this report was taken eagerly by the staff.

The program committee for the next meeting was appointed as follows: Drs. Russell, Sheffield, and Batson.

Lawrence W. Long, Secretary.

Jackson,
January 12, 1933.

Abstract: The Kline-Young Microscopic Flocculation Test and the Wassermann Test.—Dr. T. W. Kemmerer, Director of Laboratories, Mississippi State Board of Health.

The flocculation test is more sensitive than the Wassermann test. It becomes positive earlier than the Wassermann test. It remains positive longer than the Wassermann test in treated cases and also in old relatively inactive cases. Neither a negative Wassermann nor a negative flocculation test excludes syphilis. Neither test is positive during the first few days of the primary lesion. The Wassermann test may become positive as early as the end of the second week after the appearance of the primary lesion or it may not become positive until the sixth week. The flocculation test will rarely be positive before the second week but frequently it will become positive while the Wassermann is still negative. Under treatment the Wassermann tends to become negative rather rapidly—to become positive again if treatment is discontinued. The flocculation test will become negative under treatment much less rapidly than the Wassermann test. Neither test is to be taken as a criterion of cure during or shortly after discontinuance of treatment.

The Wassermann test will give false positives, so-called. This term is a misnomer; the test itself is not a false positive but the cause is other than syphilis. There is less tendency at present than formerly to stress leprosy and some other diseases as causes of positive Wassermanns, with the exception of yaws, and the authorities do not yet agree as to whether yaws is or is not syphilis. The usual cause of false positives is the growth of bacteria in the blood specimen. When the specimen can be placed in the refrigerator as soon as coagulation is complete and kept there until the test is made, no particular precautions to prevent contamination are necessary. But when this is impossible such precautions are necessary. It is impossible under "field conditions" to draw blood with a syringe and introduce it into a bottle without getting contamination in a fairly large number of cases. A Keidel tube should be used.

The flocculation test does not appear to give false positives with specimens contaminated by bacterial growths. When the Wassermann test is positive and the flocculation test is negative, repeated tests usually demonstrated that the Wassermann was a false positive. But occasionally the Wassermann remains persistently positive and the flocculation test persistently negative. Such evidence as is available seems to indicate that in these cases the Wassermann test is not a false positive. This may be comparable to the instances in the Wassermann test in which the less

sensitive antigen gives a positive reaction while the more sensitive antigen gives a negative reaction and which usually occurs in very early primary cases. The cause of this type of reaction is not known but it is not an example of the "zone phenomenon."

Kline says the flocculation test never gives false positives. I would not like to make such a broad statement concerning any test. It has been stated that the flocculation test will give a false positive in rapidly advancing tuberculosis and massive destruction of tissue.

The degree of positiveness of either the Wassermann or the flocculation test should not be taken as a measure of the degree of the infection or the progress of the treatment. The degree of positiveness of the test should be taken as a measure of the reliance which should be placed upon it, that is, the more strongly positive factor.

In my opinion the flocculation test requires more skill and judgment in interpretation than the Wassermann test and for ordinary routine work, if only one test is used, it should be the Wassermann. The flocculation test is an excellent check on the Wassermann test particularly as it picks out the false positives due to bacterial contamination. The regular flocculation test is not suitable for spinal fluids. The special flocculation test for spinal fluids is probably too liable to error for it to be used in routine work. I had hoped that the flocculation test on the blood would be sensitive enough to be positive in those cases in which the Wassermann test on the blood is negative and that on the spinal fluid is positive. But this is not the case. Tests on the spinal fluid are essential, especially in detecting those cases which in later years may develop into neurosyphilis.

STAFF MEETING OF THE VICKSBURG SANITARIUM

The regular monthly meeting of the Vicksburg Sanitarium and Crawford Street Hospital was held on Monday, January 9, at 6:30 P. M. After a consideration of the business of the staff and Reports from the Records Department and Analysis of the Work of the Hospital, Dr. F. M. Smith, Director of the Warren County Health Department, discussed the prevalence of malaria during the year of 1932 and showed a map which indicated locations of cases.

Dr. R. A. Street, Jr., presented a special case report: Generalized Peritonitis in a Colored Female.

Three Minute Reports of the Literature of the Month were given as follows:

1. Dr. G. M. Street.—Sterilization by Intramuscular Injection of Semen.

2. Dr. A. Street.—Protracted Radiation with Heavily Filtered High Voltage X-ray in Malignancies.

3. Dr. L. S. Lippincott.—Post-Mortem Findings in Hookworm Disease.

4. Dr. J. A. K. Birchett, Jr.—Surgical Treatment of Divided Nerves and Tendons of Forearm and Hand.

5. Dr. L. J. Clark.—Potassium Sulphocyanate for Painful Crises of Sick Cell Anemia and Present Status of the Ketogenic Diet.

6. Dr. G. C. Jarratt.—Methylated Antigen in Extra Pulmonary Tuberculosis.

Drs. S. W. and W. E. Johnston presented motion pictures as follows:

1. Salpingo-Oophorectomy with Appendectomy.

2. Orchidopexy with Hernioplasty and Varicocelelectomy.

The next meeting of the staff will be held on Friday, February 10, at 6:30 P. M.

Abstract: Generalized Peritonitis in a Colored Female.—Dr. R. A. Street, Jr.

Patient.—Colored female, aged 34 years, laundry worker; admitted to the Sanitarium December 17, 1932.

Chief Complaint.—Pain in right lower quadrant of abdomen; foul vaginal discharge; fever; loss of strength and appetite.

History of Present Complaint.—Began three weeks ago with vaginal discharge, moderately profuse, gradually increasing in amount and becoming foul. At first dull ache in lower right quadrant; about one week ago pain became so severe that patient had to go to bed. Pain was then accompanied by fever, loss of appetite, nausea; later some vomiting of stomach contents. Normal menstrual period two weeks ago. Was told by physician that she had "pus tubes"; rest and cold applications advised; prescription given. Fever continued and there was no improvement. Bowel movements regular up to several days ago, no movements since. Has taken only small amounts of liquid food for past three or four days. Nausea becomes worse at times; vomiting is never flocculent or large in amount.

Past History.—Has had two miscarriages, one at three months and one at four months, last three years ago. Family history not remarkable.

Physical Examination.—Temperature 101°F.; pulse 112, rapid and weak; respiration 18; blood pressure 100/60. Very acutely ill; warm, moist skin; lying quietly in bed. Poorly nourished. Sclerae slightly icteric; eyes have moribund ap-

pearance. Tongue coated and dry. A few scattered fine rales over both lung bases; breath sounds slightly diminished and rather high pitched over right base posteriorly. Heart sounds regular and rapid.

Abdomen distended, especially in upper part, where there was marked tympany. Extreme tenderness over entire lower abdomen with some muscular rigidity.

Irregular tender mass in lower pelvis, impossible to outline, and acutely tender. No bulging of fornices. Impossible to outline uterus and adnexa because of mass.

Clinical Laboratory.—Urine, catheterized specimen, shows a large trace of albumin and a few pus cells.

Blood shows leukocytes 18,300; small lymph. 6 per cent, large lymph. 10, monocytes 3, polymorph. neutrophils, 81, with 51 immature; no malaria found; sedimentation test showed slight to moderate activity. Wassermann, Kline and Young, and Kahn tests, negative.

Course.—On admission patient was given 1000 c.c. glucose solution by vein. Potassium permanganate douches were given every four hours. For several days patient seemed to improve. Daily enemas gave good results; there was no evidence of any consolidation in either lung. Abdomen remained distended, but liquids were well taken. On the fourth day (Dec. 21), patient became much worse with abdomen more distended and painful and temperature higher. A small tube was put into stomach and left for washing; glucose solution was given subcutaneously. Retention enemas of eight ounces of glucose solution were begun; always a highly colored reflux was obtained. The pulse became weaker and more rapid. On the next night (Dec. 22), patient became cold and pulse weak, but revived somewhat on application of heat and stimulation. On December 24 patient became delirious and died. At no time was condition such as to warrant operative procedure.

Permission to perform post-mortem examination of abdomen and pelvis was obtained. Peritoneal cavity was filled with thick, white purulent fluid, and a general fibrinous peritonitis was present. Examination showed no cause for the condition. Sections taken from the organs of the abdomen and pelvis and examined microscopically showed no source of peritoneal infection.

Remarks.—This case is presented as one of those occasionally met in which general peritonitis without demonstrable reason is apparently the cause of death.

TRANSACTIONS OF ORLEANS PARISH MEDICAL SOCIETY

CALENDAR

February 1—Clinico-Pathological Conference, Touro Infirmary, 10:30 A. M. to 11:30 A. M.

February 3—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

February 3—Physiology Seminar, Tulane Medical School, 5 P. M.

February 6—Eye, Ear, Nose and Throat Hospital Staff, 8 P. M.

February 8—Clinico-Pathological Conference, Touro Infirmary, 10:30 A. M. to 11:30 A. M.

February 8—Touro Infirmary Staff, 8 P. M.

February 10—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

February 10—Physiology Seminar, Tulane Medical School, 5 P. M.

February 10—French Hospital Staff, 8 P. M.

February 13—ORLEANS PARISH MEDICAL SOCIETY, 8 P. M.

February 15—Clinico-Pathological Conference, Touro Infirmary, 10:30 A. M. to 11:30 A. M.

February 15—Charity Hospital, Surgical Staff.

February 16—Eye, Ear, Nose and Throat Club, 8 P. M.

February 17—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

February 17—I. C. R. R. Hospital Staff, 12 Noon.

February 17—Physiology Seminar, Tulane Medical School, 5 P. M.

February 20—Hotel Dieu Staff, 8 P. M.

February 21—Charity Hospital Medical Staff, 8 P. M.

February 22—Clinico-Pathological Conference, Touro Infirmary, 10:30 A. M. to 11:30 A. M.

February 24—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

February 24—Physiology Seminar, Tulane Medical School, 5 P. M.

During the month of January, besides the joint meeting of the Old and New Boards of Directors, the Society has held the annual Installation Meeting and one Scientific Meeting.

At the Installation Meeting the retiring President, Dr. John A. Lanford, read his report and Dr. E. L. King gave his inaugural address. The Very Rev. Wm. H. Nes, Dean of Christ Church Cathedral, New Orleans, was the orator of the evening and gave a most interesting talk on Science, Religion and Reality. All addresses were very well received.

The following officers for 1933 were installed:
President—Dr. E. L. King.

First Vice-President—Dr. Waldemar R. Metz.

Second Vice-President—Dr. W. R. Buffington.

Third Vice-President—Dr. Theo. F. Kirn.

Secretary—Dr. Frederick L. Fenno.

Treasurer—Dr. Walter P. Gardiner.

Librarian—Dr. Alton Ochsner.

Dr. Gilbert C. Anderson.

Dr. Val H. Fuchs.

Dr. John A. Lanford.

At the meeting held January 23 papers were presented by Drs. James T. Nix and Allan Eustis. The annual reports of the Secretary, Treasurer, Librarian, Special and Standing Committees for 1932 were read at this time. The reports of the Secretary, Treasurer and Librarian were referred to their respective Report Committees for action on their recommendations.

The committees appointed to study the various phases of abuse are still working.

The dues for Active Members for 1933 were reduced from \$18.00 to \$12.00 per annum. It is requested that as many as can do so pay their dues in full in order to relieve the clerical work in the office of collecting these dues. Make checks for \$19.00 payable to the Orleans Parish Medical Society which amount includes your annual dues for the Louisiana State Medical Society. Your Medical Defense does not begin until we receive your check for your State dues. PLEASE DO THIS AT ONCE.

Dr. Daniel N. Silverman has been appointed Chairman of the Scientific Essays Committee for the year 1933, and he is very anxious to prepare his programs. Any member desiring to read a paper before the Society during this year will please send in the title of his paper and the name of the doctor he wants to open the discussion.

TREASURER'S REPORT

ACTUAL BOOK BALANCE, 11/30/32..\$	844.93
Receipts during December.....	1,881.09
	<hr/>
	\$2,726.02
Expenditures	1,157.41
	<hr/>

ACTUAL BOOK BALANCE, 12/29/32..\$1,568.61

LIBRARIAN'S REPORT

One hundred and twenty-two books have been added to the Library during December. Of these 48 were received by gift, 72 by binding and 2 from the New Orleans Medical and Surgical Journal. New titles of recent date are listed below.

Material has been collected for doctors on the following subjects:

Calculi of Salivary Glands.

Amebicides—Stovarsol, Emetine, Chinofon and Acetarzone.

Encephalitis following Pneumonia.
 Pharyngeal syphilis.
 Dermatophytosis and epidermophytosis.
 Levine tube and heat tent. Use in post-operative care.
 Cysts of the tongue.
 Amnesia following injury.
 Effect of eclampsia on fetus.
 Treatment of peptic ulcer by non-specific proteins.
 Mental tests.
 Appendicitis in children.
 Information furnished as to when Dr. A. H.

Jones was licensed to practice medicine in New Orleans (December 10, 1832).

NEW BOOKS—December:

U. S. Army—Surgeon General—Annual Report, 1932.

Modern Hospital Yearbook, 1925-26.

Central States Pediatric Society. Transactions, V. 6, 1931.

Boyd—Preventive Medicine, 1932.

Aldrich—Cultivating the child's appetite, 1932.

Frederick L. Fenno, M.D.,
 Secretary.

LOUISIANA STATE MEDICAL SOCIETY NEWS

NOTICE

According to opinion received and the legislation passed at the last Legislature, Louisiana physicians are exempt from the license tax.

A LETTER TO PARISH AND DISTRICT SECRETARIES

Dear Doctor Blank:

In the final analysis, the confidence of the doctors in the medical profession and medical organization is the incentive for the development of the strength or weakness of our organization. Such an analysis looks forward continually with faith and confidence in the future, and attempts to give the character of service which is most satisfactory and helpful to the members we are serving. It is with this thought in mind, as we are starting the New Year, that we make known to you our appreciation of your good will and cooperation during the trying year just completed. We express to you our sincere wish that the year ahead will justify in a large measure the faith that we have and that we hope you have in the continued growth and prosperity of our organization.

We, therefore, hope that you will make every effort possible to fortify and strengthen your organization by increasing your numerical strength as well as intensifying the scientific evaluation of such an organization to its members. In these efforts you may be assured of our desire to cooperate and be helpful in any constructive development of these aims and ambitions. Besides, I think one of the most vital progressive actions would be to have a monthly review published in the Journal of the activities of the parish and district societies, as well as personal mention of the doings and actions of its various members. This material would fortify other activities and serve to increase the interest of the members in the functions of the organization.

We realize that in the past years we have not been as successful as we have desired in the col-

lection of this valuable information. Our Journal is noticeably deficient in medical news and items of our state, parish and district societies, especially in comparison with such material from our sister and adjoining State of Mississippi. We are very anxious to build up this department, with the feeling of service to the members of the organization, and you can depend upon our full cooperation in helping to collect and assemble this material for proper publication. Furthermore, such valuable material serves as historical facts for use in the recording of medical activities, not only in the parishes, but will in the ultimate give us a proper indication of the progress or decline of any particular locality of the State.

The pages of the Journal close on the twentieth of the month preceding the issue. Won't you help us in this regard and have a writeup sent in for publication each month? If it is impossible for you to handle this, would it be consistent to have some one designated in the Society to carry on this function? I think the subject one of immense value and ultimately will prove of intense interest to your Society and the profession.

Wishing you all success for 1933, I am,

Yours very respectfully,

P. T. Talbot, M. D.,
 Secretary-Treasurer.

ON THE ROLE OF THE FRENCH PHYSICIANS OF LOUISIANA IN THE MEDICAL AND COLONIAL HISTORY OF THE STATE*

To France, Louisiana owes to this day the most heroic, romantic and colorful periods of her history. To France, she owes all that which is basic in the primordial structure of her social organi-

*Extracts from an address delivered by Dr. Rudolph Matas at the banquet of the French Veterans of the World War resident in Louisiana in commemoration of the Armistice, on November 10, 1932, when the cross of the Legion of Honor was conferred upon him by the French Government.

zation. For over a century, language, government, education, agriculture, industry, architecture, commerce, religion, law, medicine and all the esthetic arts and literature were essentially French, and Louisiana, as typified by New Orleans, was only a reflex or mirror of the visage and soul of France.

To speak only of my own profession, Medicine, it can be safely said that from the establishment of the colony by Iberville and Bienville in 1699, to the year 1834, when the Medical College of Louisiana (now Tulane) was founded by the enterprise of a group of prominent practitioners in New Orleans, among whom figure conspicuously the names of the French Louisianians, Luzenberg and Cenas, the education and the system and methods of medical practice were exclusively French. Even during the thirty-four years of the Spanish interregnum (1769-1800), the French methods of practice remained dominant and uninfluenced except in official documents in which the Spanish language was obligatory.

For nearly half a century after Louisiana had become a part of the American Union, the creole youth, "la jeunesse doree," and in fact all those whose education and resources justified a medical career, all looked to Parish as the fountain source of their inspiration and knowledge. The foremost names in the medical history of Louisiana are directly French or of French-Creole derivation. And it is in this way that not only the science and art of medicine was brought to Louisiana by the French colonial surgeons, but that in later years, and up to the first half of the last century, the principles and methods of French practice prevailed and were cultivated by their Creole descendants. It is they who organized the first boards of health and the medical societies, and who made effective the first laws to regulate the practice of medicine. They also published in French the first contributions to the literature and progress of Medicine in this State.

Quite apart from the distinguished record of the French colonial surgeons who were sent by the French government to Louisiana in their official capacity, the greatest credit is due to their Creole descendants who, educated in France, cultivated and diffused the French language which they spoke and wrote as their native tongue, and often with a purity, perfection and elegance that made them as fit for the orator's tribune as the National Assembly in France or for the lecturer's platform, as the best of the Parisian conferenciers at the Sorbonne.

It is not surprising, therefore, that the French literature of Louisiana should find some of its most brilliant exponents in the medical profession.

Suffice is to recall the great names of Alfred Mercier, novelist, essayist, poet and one of the

most learned of classic scholars—the founder and perpetual secretary of the *Atheneé Louisianais*; also his distinguished brother Armand, its first president, in 1876, who was one of the most brilliant surgeons of his day.

It is notable that the two brothers, despite their large clientèle, found time to devote to the culture of literature. The foundation of the *Atheneé* brought to light many medical intellectuals who flourished in this metropolis and in the country parishes of Louisiana. Notable among whom were Delery, Testut, Fortin, Turpin, Faget, Dell Orto, Huard, Dupaquier, pere et fils, Sabin Martin, Devron, Castellanos, J. M. and P. Durel, Hava, Layton, Formento, Souchon, Bayon, Borde, Touatre, and in the French speaking parishes, Blanchet, Duperier, Sabatier, Francez, Pavy, Geraud, Lambremont and that eminent Canadian of French descent, McGuire—and still so many others who apart from their purely professional attainments shed honor and lustre on French culture in Louisiana, in language, science and letters.

Incidentally, let me recall that one of the noblest and most enduring monuments of the French and Spanish regime is our Charity Hospital which was founded in 1739 by Jean Louis, an humble French sailor who left all his life savings for a hospital where the poor could be treated for charity.

Again, it is pleasing to refer on this occasion to Francois Marie Prevost,[†] the greatest hero in the medical history of Louisiana. He was a French colonial surgeon, who, having emigrated from San Domingo at the time of the negro rebellion, settled in Donaldsonville, Parish of Ascension, in the beginning of the last century, about 1800 or 1801, at that time a mere hamlet in a plantation settlement. It was there that this intrepid and skillful surgeon was the first to perform the cesarean operation in North America. He performed the operation on negro slaves suffering from pelvic rachitic deformities, thereby saving many otherwise doomed mothers and unborn babies by an operation, which, at that time, had been condemned as too hazardous by the greatest authorities in the surgical world.

His courage, enterprise and skill were rewarded by the most unprecedented success, but yet so modestly regarded by him that the surgical world remained ignorant of his achievements for over half a century; and, when we consider that Prevost operated in the most primitive surroundings, in negro cabins, without anesthetics, antiseptics, adequate instruments or trained assistants, his operations must be regarded as extraordinary achievements which place him in the front rank of the world's great pioneers in abdominal surgery. He will remain a heroic figure in our history

[†]Born at Ponts de Ca, near Angern, France, in 1764; died in Donaldsonville in 1852.

and a great honor to the French traditions of Louisiana.‡

Nor can I omit even in this hurried reference to the accomplishments of the physicians of Louisiana who have won a right to be regarded as the benefactors of its people, the name of Jean Charles Faget. Faget had graduated with great distinction in Rouen, the home of his ancestors, and when he established himself in New Orleans, he was at once recognized as a profound scholar and savant by his confreres in the profession. It was he who introduced the thermometer in medical practice in Louisiana and by his studies definitely established facts of great diagnostic importance in yellow fever which constitute what is known as Faget's laws. He was among the first to relieve parturient women of the pangs of labor by the anesthetic use of chloroform. By this alone, his name is worthy of enduring and grateful memory by the suffering motherhood of Louisiana.

I could go on almost indefinitely with an account of the role played by the French physicians of Louisiana and of their French speaking descendants, in the history of medicine and in the civilization and intellectual development of this State. But I have said enough even in this passing survey to show that in this respect, Louisiana stands conspicuously alone in the Sisterhood of the American States as an example of the fundamental cast of her Latin civilization and in the fact that from the very beginning of its colonial existence the people of Louisiana benefitted by the presence of a highly cultured class of medical practitioners who, trained and educated in the best French schools brought with them not only all the resources of the healing art, but also that European culture and refinement that was denied the majority of the practitioners of medicine who developed in the early and formative period of the Southern and Western States.

IBERIA PARISH MEDICAL SOCIETY

The annual meeting of the Iberia Parish Medical Society was held in the office of Dr. B. L. Stinson, New Iberia; Dr. Guy A. Shaw, of Loreauville, presiding.

At the election of officers for the ensuing year Dr. Guy A. Shaw was re-elected President, and

‡It is quite definitely ascertained that Prevost performed his first Cesarean section, saving both mother and child in 1822; the exact date, however is undetermined. This would give him priority over the successful operation performed by John Lambert Richmond, of Newton, Ohio, on April 22, 1827. Prevost performed the Cesarean section four times prior to 1832, with three successful results for mother and child.

Recently, and since this address was delivered, the claim for the first Cesarean section in North America has been made for Dr. Jesse Bennet, who operated on his wife, saving her and child, at his home in Morgan County, West Virginia, in 1794. (Louis Frank, *proc. So. Surg'l Ass'n*, Dec., 1932.)

It is evident that these early pioneers were operating independently and with no knowledge of each other's work.

Dr. David Turest, of New Iberia, was elected Secretary-Treasurer. These two were also elected delegates to the Louisiana State Medical convention to be held at Lake Charles.

Dr. Henry Allen King, Jr., of New Iberia, and Dr. F. P. Perret, of Jeanerette, were unanimously elected members of the Parish Medical Society.

David Turest, M. D., Secy-Treas.

SECOND DISTRICT MEDICAL SOCIETY

The meeting of the Second District Medical Society was held at the home of Dr. P. A. Donaldson at Reserve, La. The speaker of the evening was Dr. Robert H. Potts, of New Orleans, who read a paper on "Pneumonia." Dr. J. S. Parker, of Reserve, was elected Delegate and Dr. L. O. Waguespack was elected Alternate to the Louisiana State Medical Society meeting. The guests were entertained at a banquet.

The next meeting of the Society will be held at the home of Dr. L. O. Waguespack in Vacherie, on February 16.

SOUTHERN MEDICAL ASSOCIATION NOTES

At the recent meeting of the Southern Medical Association held at Birmingham a number of New Orleans men were honored.

Dr. Homer Dupuy was re-elected Chairman of the Council, and the following men were appointed as Chairmen and Secretary of Sections:

Dr. E. L. King, Chairman of Sections on Obstetrics.

Dr. Daniel N. Silverman, Chairman of Section on Gastro-Enterology.

Dr. W. A. Wagner, Secretary, Section on Ophthalmology and Oto-Laryngology.

Dr. J. I. Lemann, Chairman of the Section on Medicine.

NATIONAL INSTITUTE OF HEALTH

The National Institute of Health, under the control of the Surgeon General of the United States Public Health Service, was created in 1930 as a result of legislation fathered by Jos. E. Ransdell, then a United States Senator from Louisiana. It is an enlargement of the old Hygienic Laboratory, and is the scientific research center of the Public Health Service. Its function is to ascertain the cause, prevention and cure of diseases affecting human beings. The act provided for an appropriation of \$750,000, which is now being expended in the construction of two splendid buildings in Washington. It also authorized the Secretary of the Treasury to accept gifts for research in problems relating to the health of man.

Although the financial support for research work has been comparatively small in the past, government scientists have made extremely valuable discoveries concerning such diseases as malaria, pellagra, hookworm, tularemia, undulant fever, psittacosis, typhus, Rocky Mountain spotted fever, and many others.

MEDICAL RESERVE CORPS

From February 12 to 25, 1933, there will be a training period for Medical Department Reserve Officers of the Army and Navy, made possible at the University of Washington Medical School, St. Louis, Missouri, by the courtesy and enthusiasm of the faculty of this school in cooperation with the Medical Departments of the Army and Navy.

The program of the clinics will be under the direct supervision of the faculty of the Washington University. The military instruction, which for the first time includes instruction with reference to the medical service of the Navy, will be under the direct supervision of Colonel George A. Skinner, Medical Corps, United States Army, Corps Area Surgeon, assisted by Lieutenant Commander Reuben H. Hunt, Medical Corps, United States Navy.

Applications for attendance should be forwarded to the Surgeon, Seventh Corps Area, Omaha, Nebraska.

DR. CAZENAVETTE HONORED

Dr. Lionel S. Cazenavette has been appointed Superintendent of the City Hospital for Mental Diseases by Mayor Walmsley. In addition to his duties as superintendent, the holder of this position also becomes the neurologic consultant and expert witness for the City of New Orleans. Dr. Cazenavette is Professor of Neurology at Tulane University, Senior Visiting Physician of Charity Hospital, and neurologic consultant at the Carville Leprosarium.

FRENCH HOSPITAL ELECTIONS

Dr. H. B. Alsobrook was re-elected Chairman of the Staff of the French Hospital. Dr. Martin Miller was elected as Vice-Chairman, and Dr. N. J. Tessitore, Secretary. Dr. Peter Graffagnino was reappointed as Chairman of the Executive Committee, and Dr. W. H. Harris as Chairman of the Standing Committee. Dr. Tessitore becomes Chairman of the Program Committee, and Dr. Miller of the Membership Committee.

NEWS ITEMS

On January 11 Dr. H. W. E. Walther, head of the department of urology, Southern Baptist Hospital, and president of the Social Hygiene Association of New Orleans, addressed the student body of Louisiana State University, in Baton Rouge, his subject being: "The Prevention of Syphilis: A Problem for the Youth of Our Country."

Dr. E. McC. Connelly has been appointed consulting neurologist on the Staff of the Marine Hospital, taking the position left vacant by the death of Dr. Daspit.

Dr. Basil S. MacLean, Superintendent of the Touro Infirmary, has been signally honored by

appointment on a small committee of the American Hospital Association to study medical cost and hospitalization plans. The committee is composed of a small group of the outstanding hospital administrators in this country.

Dr. Fred L. Fenno, Secretary of the Orleans Parish Medical Society, has been appointed as Consulting Neurologist to the Eye, Ear, Nose and Throat Hospital.

Dr. Frank J. Chalaron, one of the very active members of the Louisiana State Medical Society and head of the Department of Neurology of the Mercy Hospital, has been elected President of the Staff of the Mercy Hospital.

Dr. Isidore Cohn, Professor of Clinical Surgery with the Graduate School of Medicine of the Tulane University of Louisiana, attended the meeting of the Fracture Committee of the American College of Surgeons held at Philadelphia, Pa., January 14 and 15, 1933.

Assistant Surgeon W. E. Kramer of the United States Public Health Service has been relieved from duty at the Marine Hospital, Galveston, Texas, and assigned to duty at the Quarantine Station, New Orleans.

Assistant Surgeon D. W. Patrick has been relieved from duty at Quarantine Station, Algiers, La., and assigned to duty at the Marine Hospital, New Orleans.

Dr. Adrian S. Taylor, of Birmingham, has been appointed by the Board of Trustees of the Clifton Springs Sanitarium and Clinic as Superintendent and Surgeon-in-Chief of their institution.

The International Congress for the Protection of Childhood will be held in Paris from the fourth to the ninth of July, 1933. The meeting will be divided into eight sections, where such subjects as parental care, early infancy, later infancy, adolescence, and so on, will be taken up.

INFECTIOUS DISEASES IN LOUISIANA

Dr. J. A. O'Hara, President of the Louisiana State Board of Health, in collaboration with the Treasury Department of the United States Public Health Service, has issued morbidity weekly reports, which briefly abstracted contain the following information: For the fifty-first week of the year, ending December 24, the outstanding and marked increase in the number of cases of influenza deserves record. During this week there were 9162 cases reported, as contrasted with slightly under 5,000 the previous week. Despite this large number of cases only 60 cases of pneumonia were reported. Other diseases that appear in double figures were: Seventy-four cases

of syphilis, 33 of tuberculosis, 67 of gonorrhea, 27 of cancer, 23 of diphtheria. One case of typhus fever was reported in this week, as well as 8 cases of small pox. For the last week in the year, there was a magnificent drop in the number of cases of influenza throughout the State, almost 8,000 less cases occurring than in the previous week, 910 being reported. Other diseases that appeared in large numbers include: Thirty cases of cancer, 63 of pneumonia, 41 of tuberculosis, 17 of diphtheria, 16 of gonorrhea, 21 of syphilis, and 11 of septicemia. There were also reported 9 cases of small pox, 2 of meningitis, 1 of poliomyelitis, and 1 of typhus fever. For the first week of the year, ending January 7, there was still a considerable drop in the cases of influenza, 653 being listed for this week. The effects of the influenza of the previous few weeks is shown by the large number of cases of pneumonia that were reported this week, 109 being listed. There was also listed for this week 68 cases of chicken pox, 43 of tuberculosis, 32 of gonorrhea, 20 of syphilis, 23 of cancer, 12 of scarlet fever. Two cases of small pox were reported in this week, and 3 of meningitis. For the second week of the year, ending January 14, influenza had dropped to 560 cases, and only 73 of pneumonia. There were also listed 24 cases of syphilis, 21 of tuberculosis, 22 of diphtheria, and 16 of scarlet fever. The unusual diseases reported this week include 1 case of tularemia, 2 of meningitis, 1 of undulant fever, and 5 of small pox.

HEALTH OF NEW ORLEANS

The Department of Commerce, Division of Vital Statistics, has issued the following weekly reports concerning the health of New Orleans. For the week ending December 10, there were reported in the City 256 deaths, giving a death rate of 28.2 for the total population, and a rate of 23.3 for the white, 40.3 for the colored, as a result of the death of 150 of the former and 106 of the latter. The infant mortality rate this week was 74, 52 in the white and 114 in the colored. The following week, ending December 17, saw a considerable reduction in the total number of deaths in the city, there being 176, divided 109 white, 67 colored, with a death rate of 19.4, 16.9, and 25.5 for the three groups. The infant mortality rate this week was 68. There was some increase in the death rate in the succeeding week, which ended December 24, there being 192 deaths giving a death rate of 21.2. The white deaths were 116 in number, giving a rate of 18.0, and the colored was 76, with a rate of 28.9. The infant mortality rate was 57, with an extremely low rate of 17 for white children, as contrasted with 131 in the negroes. The last week of the year after the subsidence of the influenza epidemic saw a considerable drop in the death rate, it being 16.7 as a result of 152 deaths in New Orleans. The rate of the white

population was 15.0, and for the negroes 20.9. The infant mortality rate for this week was 80, 70 for the white, and 98 for the colored. The first week of the new year was characterized by a relatively low rate, being 16.2 for the total population, 14.8 for the white, and 19.8 for the colored, as a result of 150 deaths, the two groups divided 97 white and 53 colored. The infant mortality rate was 62 for this week, showing a reversal of the usual figures, the rate being very much higher, 80, in the white than in the colored race, in which the rate was 31.

SOUTHEASTERN SURGICAL CONGRESS

The fourth annual assembly of the Southeastern Surgical Congress will be held in Atlanta, with the Biltmore Hotel as headquarters, March 6-8, 1933. A splendid list of guest speakers has been provided for this meeting. Included in the list who will present papers are such men as Doctors Orr of Kansas City; Crile of Cleveland; Haggard of Nashville; Jackson of Philadelphia; Cabot of Rochester; Royster of Raleigh; Ochsner of New Orleans; Lewis of Baltimore; and Houston of Augusta. In addition to the prepared papers, most of these speakers will also hold clinics.

CONGRESS ON MEDICAL EDUCATION, LICENSURE AND HOSPITALS

The annual congress on Medical Education, Licensure and Hospitals (composed of the Council on Medical Education and Hospitals of the A. M. A.; the Association of American Medical Colleges; Federation of State Medical Boards of the U. S.; the American Hospital Association) will be held at the Palmer House, Chicago, on February 13 and 14, 1933, when matters of vital importance to American medicine will be considered.

Problems menacing the American medical profession will be presented for solution in this meeting—Contract Practice, Regulation of Specialists, Enforcement of Practice Act and what shall be done with the 1500 American students soon to be graduated from European Medical Colleges (without hospital service, internship, examination for "license" and other privileges granted by these colleges to their native students) and returned to the United States for licensure and practice. Many of these students were too low-grade to qualify for entrance to our Class A colleges. They are sub-standard products.

Through its constituent State Boards, the Federation controls licensure in this country, and it must find a solution for many problems. Therefore it is imperative that every State Board, Bureau of Licensure and reputable medical college shall in this meeting make known its attitude and that of the reputable medical profession of its jurisdiction on the problems to be discussed.

T. J. Crowe, President.

W. L. Bierring, Secretary.

MISSISSIPPI STATE MEDICAL ASSOCIATION NEWS

L. S. Lippincott, Editor

Jacob S. Ullman, Associate Editor

D. W. Jones, Associate Editor

LET'S BE MORE CHEERFUL

There are a number of black lines in our Mississippi section of the JOURNAL this month. They mark the deaths of some of our confreres. They have performed their duties well. They will be missed. There are a number of other notes that could well be marked with at least shaded lines. Are we getting discouraged? Are we ready to say that we are beaten? Are not the words "depression" and "hard times" being thrown at us too much?

Ought we not to be expressing our thanks that we are alive and doing so well? There were fewer deaths among Mississippi physicians in 1932 than for the two previous years. The average age at time of death is higher. We are living longer. Is not grumbling a rather common fault? How many of us back in those years which we now look upon as "good times" did not think we ought to have even more than we had? Are we really not getting more of the worth while things now than we did then? It is always hard to retrench. But are we not really better for it?

We get nowhere by constantly talking "hard luck." By constant repetition we make ourselves believe conditions are worse than they are. As physicians, we all know that we can make anyone ill by telling him how badly he looks, and, also, by cheerfulness our cures are made the easier. As physicians, constantly lauded as the family friend and consultant, should we not set the example of cheerfulness to others? Should we not be the leaders that start the ball rolling upward?

Let's be physicians in all that the word means, NOW AND ALWAYS.

In the next number of Mississippi News, the word "depression" will not appear.

THE INDIGENT SICK

The present demand for free medical service is one of our important economic problems. It is one of vital interest to the medical profession, and one that should concern the general public if suffering humanity is to be given the advantage that scientific medicine can provide. The medical care of the poor, long considered the responsibility of the physician, has become such a staggering burden that broader shoulders must assume the load.

I am particularly interested in the problem as it affects the community hospital. In the past, when the majority were able to pay their hospital bills, private charity could care for the occasional

indigent without undue burden, but the present economic condition has made the indigent patient the general rule rather than the exception. Yet, the community expects the hospital, regardless of conditions, to extend aid at any moment. Day and night it must stand open to receive cases. It cannot be so heartless as to refuse aid while it investigates possibility of payment. It is expected to be the community's health agency, available at all times for all persons. This is as it should be, but if the community wants this institution and its protection to continue, it should see that it is not forced to take care of the community's charity.

What assurance have we that the present economic condition is only temporary. We have lived in hopeful expectation for the past three years and the problem has rapidly become more bewildering. Shall our scientific profession dream on about the good old days, inhaling the anesthesia of current optimism, and watch this little sanctuary of the sick die the marasmic death with which it is threatened? Or shall we arouse to face conditions as they exist and bestir ourselves to pursue the sane and effective course of writing the formula and demanding that the public furnish the ingredients with which to nourish it back into the benevolent institution that it should always remain?

The formula in my opinion is simple. The full cost of the indigent sick should be the obligation of the public at large and should be met through taxation. I am an economist at heart and fear the evils of excessive taxation that are even now beginning to show their ugly heads upon our economic horizon; but I believe the taxpayer, like the plucked goose, would not be so restful if more of the feathers were made into a jacket to protect it against the vicissitudes of life, rather than into a comfort for its master. This is the solution. State, county and municipal governments must recognize this necessary factor in the health of its constituents and make adequate provision by economizing in less vital fields. I believe that the county should be the unit of organization. Each county should have its community hospital and the county and state should contribute equally to a fund adequate to assure scientific medical care for its indigent sick, in this hospital. Duplication of expenditure for hospital facilities should be guarded against, and the money so appropriated spent only for the actual care of the sick. Sufficient hospital facilities already exist in, or in the approximate vicinity

of each county of our state, to make this plan workable. The control of these hospitals must remain free from political influence and the expenditure of appropriated money be regulated by the Mississippi Hospital Association.

The state should continue to care for the chronic sick such as the insane and tuberculous but should turn over the state owned general hospitals to the counties in which they are located for the care of the acute indigent sick of those counties, to be operated by a fund contributed to by state and county alike, the expenditure of which is to be regulated by a medical board and board of trustees appointed by the State Hospital Association through recommendations of the County Medical Society. The state thereafter should consider these hospitals the same as private community hospitals selected to serve the other counties and contribute to all alike on a wealth per capita basis of each county. Thus the state appropriation to care for the acute indigent sick will be evenly distributed over the whole state. Each county will appropriate a sum at least equal to that of the state. The funds so appropriated should be adequate for periods of depression and carefully guarded during periods of prosperity so that a surplus may accumulate to meet the emergency of dire distress such as the present.

So much for the formula. The ingredients are obtainable if only the medical profession will become sufficiently aroused. No one has greater influence with the people than the family physician has with his many patients. This influence should be used to educate the people to their needs and assist them in placing their needs before their legislators. Why should we hesitate to present the truth to those who will probably welcome it? Too long have we held aloof, with false dignity, from using our political influence in economic problems that threaten our profession. Is it undignified to fight for the righteousness of a profession as great as ours, when it means so much to the civilized world?

A. M. McCarthy.

Electric Mills, January 9, 1933.

MEDICAL WRITING

(Continued)

From "THE ART AND PRACTICE OF MEDICAL WRITING," Simmons and Fishbein. By permission.

STYLE

"James Huneker said: 'Style cannot be taught. A good style is direct, plain and simple. The writer's keyboard is that humble camel, the dictionary.' Sir Quiller-Couch put it in another way: 'Style in writing is much the same thing as good manners in other human intercourse.' It would

be folly, therefore, to attempt here to teach medical writers that which cannot be taught.

"FINE, OR FANCY, WRITING"

"Whenever one feels an impulse to perpetrate a piece of exceptionally fine literature, one should obey it whole-heartedly, but should delete what he has written before sending the manuscript to press. 'Fine writing' is not especially a fault of medical literature, yet it occurs with amazing frequency. Following are example from manuscripts submitted for publication:

"The pragmatic verity of this physiological concept of disease is established by its usefulness: with functional integrity our goal, the no-thoroughfare of unattainable structural integrity leaves us no longer at a therapeutic non-plus.

"Quite remarkable, but it doesn't mean anything.

"But what of the child? Who has championed it rights? Summoned against its will or without its consent into this world of trouble, pain, sickness and finally death, what Rousseau or Voltaire shall sound the tocsin, and call upon the infant muling and puking in the nurse's arms, to demand that its own mother shall give it that lactic fluid that is its primal right. Bid it howl like all the heads of Cerebrus against being condemned to partake of milk of cerulean hue contaminated by *Bacillus bulgaricus* prescribed by some adolescent and ardent disciple of Aesculapius. What Danton or Robespierre shall band together the sansculotte toddlers so that they may not be torn from the kindly face of mother earth, washed and dressed and sent to kindergarten where all of their play is so scientifically arranged by followers of Pestalozzi and Froebel that good fairies are unknown to them, and a 'primrose beside a mossy bank, is to them but a primrose, nothing more.' Where they are taught, like the clown in Lady Browning's poem, 'to pick simples, turning a broad back to the glory of the stars.'

"The author meant it seriously: It was part of a presidential address before a serious gathering.

"The specificity and mathematical exactness of its effects in given dosages of which Ehrlich dreamed has gone glimmering among the pitfalls of spirochetal individuality and variation in human susceptibility.

"Here the error is not so obvious; it lies in the use of words which sound extraordinarily well but which do not apply and therefore are confusing. Note 'glimmering' and 'pitfalls'."

(To be continued)

MORE ACCURATE REPORTS

While attending the meeting of the Southern Branch of the American Public Health Association held in Birmingham, Alabama, just prior to the meeting of the Southern Medical Association,

we were very much interested in a discussion of some of the problems peculiar to the southern states, etc. During one of these discussions a pamphlet was circulated which was a tabulation of the number of deaths from pellagra occurring in forty-five states, and covering a period of time from 1915-1929, inclusive.

In looking over this sheet we found that the deaths from pellagra occurring in Mississippi from 1919-1929, inclusive, showed a total of 6,377. We were more profoundly impressed when we saw that this was the highest death rate for this disease of any other state over a like period of time carried in this tabulation. We noted next to Mississippi was South Carolina, over the same period of time, 1919-1929, inclusive, had 5,881 deaths. North Carolina over the same period was accredited with 5,315 deaths. Tennessee, over a like period, was accredited with 2,660 deaths. We assume that these figures were taken from the mortality statistics issued by the U. S. Department of Commerce, Bureau of Census, and were as accurate as statistics go, and were entirely accurate when considered from a numerical standpoint only, as said information was based on death certificates signed by licensed, practicing doctors.

We regret this pamphlet did not carry Alabama's total over a like period of time, but for the five years carried for Alabama the total was 2,738, while for the same period in Mississippi, Mississippi's total was 3,348. The statistics from Arkansas showed only a mortality for three years, 1927-1929, inclusive, and their total was 1,803, as compared with Mississippi's total for the same length of time which was 2,215. The total for Louisiana for the eleven years as stated above was 2,660 as compared with Mississippi's 6,377.

We would not presume to question the diagnosis made by the members of our medical profession who have signed these death certificates, but we are at a loss to explain to our own satisfaction just why some of our surrounding states with practically as large colored population, or indigent white population, as we have do not show approximately the same number of deaths, and we have been thinking if it would be amiss or unethical for one who is continually studying mortality reports and causes assigned for death, to respectfully suggest that in view of the fact of the unfavorable publicity such high death rates give us, and in view of the fact of the economic stress we are now experiencing, and will perhaps experience for a number of years, that may be conducive of greater prevalence of pellagra, in view of the fact that although the problem of the cause of pellagra may not have been fully agreed upon, yet its relation to a limited diet can hardly be denied and that the disease may be prevented and in most cases cured by a diet well balanced

and carrying the P P vitamins. I repeat, may we not respectfully suggest that greater care and consideration be given by us in making out death certificates and perhaps assigning as the cause of death, pellagra, based on some skin eruption and otherwise obscure symptoms when perhaps in our own mind we question the correctness of our own diagnosis when we assign pellagra as the cause of death.

F. Michael Smith.

Vicksburg, December 21, 1932.

PELLAGRA DECREASING

Apropos of the communication from Dr. F. Michael Smith in this month's Mississippi News, the following from "Science," of December 16, 1932, should be of interest:

"Deaths from pellagra, 'hard times' disease, have unexpectedly decreased during the present depression. Vegetable gardens and yeast seem to have effectually routed the former specter of economic depressions.

"These two factors, together with education in pellagra-preventive measures, seem to have reduced the pellagra death rate by about one third in face of the country's worst depression, according to a discussion of the subject by Dr. William DeKleine, of the American Red Cross, at a meeting of the Florida Public Health Association."

It would seem that Dr. Smith's suggestion that greater care and consideration be given in making out death certificates is an especially timely thought. It is not good for us as physicians or for our state to lead the country in incidence of pellagra. Let's report pellagra when it exists by all means but let's be sure of our diagnosis before we make such reports.

REGISTRY OF TECHNICIANS

In order to maintain a high level of efficiency and ensure adequate scientific training of technicians in hospitals and private laboratories, The American Society of Clinical Pathologists instituted in 1928, a Registry for passing on the competency of workers in this field.

The American Medical Association and the American College of Surgeons have endorsed the work and aims of the Registry by encouraging hospital administrators to have their clinical laboratory technicians certified by the Registry. It has also received the active cooperation of the hospital, laboratory directors, many of whom are members of the American Society of Clinical Pathologists, in giving information on the qualifications of applicants.

After April 1, 1933, their recommendations will be supplemented by a written examination which will necessarily increase the present fee of Five Dollars to Ten Dollars.

Over thirteen hundred names of qualified laboratory technicians are now on these lists. As the improvement in the quality of laboratory personnel is a forward step in the movement for hospital standardization all clinical laboratory technicians with the proper qualifications are urged by the Registry to seek recognition of their ability by a certificate.

The Board of Registry consists of Philip Hillkowitz, M. D., Chairman, Denver, Colorado; Kano Ikeda, M. D., St. Paul, Minn.; Roy W. Hammack, M. D., Los Angeles, California; Walter E. King, M. D., Detroit, Michigan; M. W. Lyon, M. D., South Bend, Indiana; Asher Yaguda, M. D., Newark, N. J. Mrs. Anna R. Scott is Registrar with office at 234 Metropolitan Building, Denver, Colo.

NEWTON INFIRMARY

Dr. M. L. Flynt, who has been in charge of the Newton Infirmary for the past five years has closed his office in the Infirmary to open an office in the Meridian Medical and Surgical Clinic.

Drs. O. Simmons and D. N. Stennis will continue to have their offices at the Infirmary and will carry on the medical and surgical services with Dr. Flynt as visiting surgeon. Mrs. Simmons, a graduate of the Baptist Memorial Hospital, Memphis, a member of the nursing staff of the Campbell Clinic for two years and assistant night supervisor at the Memphis General Hospital for three years, will be superintendent of nurses and general supervisor of the operating room. Dr. and Mrs. Simmons will have their living quarters in the Infirmary. Mrs. H. McMullan will serve as chief dietitian. Mrs. Scottie Kemp will continue as bookkeeper and laboratory technician.

Mrs. K. M. Strain, former superintendent of nurses of Newton Infirmary, has accepted a position in Dr. F. G. Riley's Hospital, Meridian. Newton, January 6, 1933.

MERIDIAN MEDICAL AND SURGICAL CLINIC

Six Meridian physicians and surgeons have organized the Meridian Medical and Surgical Clinic, which will work in conjunction with Dr. F. G. Riley's Hospital. These are Drs. M. L. Flynt, C. J. Lewis, C. R. Stingily, T. D. Bordeaux, G. L. Arrington, and F. G. Riley. Dr. Riley has announced that his hospital is now a general hospital for the care of all surgical and medical patients.

The entire second floor of the Knights of Pythias building, located at the corner of Ninth Street and Twenty-second Avenue, has been leased and work of remodeling for the offices of the clinic will begin at once. Occupancy is expected on or about January 1. The building will be renovated and reconstructed with all the accommodations of a modern clinic.

Dr. M. L. Flynt, for the past five years surgeon

and owner of the Newton Infirmary, Newton, and Dr. C. J. Lewis of Meridian, will be the surgeons and obstetricians for the group and for Dr. Riley's hospital; Dr. T. D. Bordeaux will be chief of the department of internal medicine and diagnosis; Dr. F. G. Riley and Dr. G. L. Arrington will be the pediatricians; and Dr. C. R. Stingily will be in charge of the x-ray, pathological and clinical laboratory departments.

MISSISSIPPI STATE BOARD OF HEALTH

The recent annual conference of health officers, sanitary engineers, and sanitary inspectors, which was held in Jackson, was the most successful ever had. There were one hundred and twenty-three in attendance and the program was excellent. The out-of-state speakers were: Dr. W. A. Evans, Professor of Public Health, Northwestern University, and Health Editor of the Chicago Tribune; Dr. L. M. Graves, Health Commissioner of Memphis, Tennessee; Dr. G. A. Wheeler of the U. S. Public Health Service; and Dr. Allen W. Freeman, Professor of Public Health Administration, Johns Hopkins University, Baltimore. Dr. Freeman gave a two-hour talk each morning of the conference.

The Copiah County Health Department will be continued on full-time basis. Because of lack of appropriation, it was thought that it would be necessary for the department to close; however, additional funds have been secured.

The following Mississippi physicians were awarded fellowships in December by the Commonwealth Fund of New York City: Dr. D. T. Brock, McComb; Dr. J. E. Hewitt, Summit; Dr. A. J. Fortinberry, McComb; Dr. S. Paul Klotz, McComb; Dr. H. F. Tatum, Meridian; Dr. W. N. Jenkins, Port Gibson; Dr. L. L. McDougal, Booneville; Dr. G. C. Terrell, Prentiss; Dr. J. B. Thigpen, Bay Springs; Dr. J. E. Ellis, West Point.

HOOKWORM SURVEY IN MISSISSIPPI

From 1909 to 1914, hookworm surveys were made in the various counties of Mississippi. This work was done by the Mississippi State Board of Health with the Rockefeller Sanitary Commission cooperating. The results of these surveys showed a rather high infestation rate in many of the counties. As a result of the findings, much sanitation was done and many thousand people treated for hookworm infestation. Although surveys have been made since this time in specific counties where full-time health workers are employed, no surveys have been made with the idea of showing the conditions which might apply to the state as a whole or to any major section.

The State Board of Health has been interested in such a survey for some years. Beginning September 1, 1932, such a survey was started with the Department of Preventive Medicine of Van-

derbilt University and the International Health Division of the Rockefeller Foundation cooperating. The program for this study of hookworm and other helminths in Mississippi includes an analysis of existing data and an examination of specimens of feces from all areas in the state. The studies to be made are:

1. The relation between soil and hookworm and other helminths after the examination of the fecal specimens is completed.

2. The incidence and intensity of infestation of these helminths at the present time together with the geographic, age, and sex distribution. By studying these factors it would be possible to outline accurately not only the sections in the state in which hookworm is present but also point out the severity of the problem in the various age groups of the population.

3. A study of hookworm infestation in the negro race is also being made, including comparable population groups of whites and negroes of the same age to determine the intensity of infestation together with the physical condition of those two groups and the environmental conditions under which each group lives.

4. An investigation of the methods of excreta disposal in each county will be made.

To date, the examinations of eight counties have been completed. Twenty per cent of the 8,363 specimens examined showed the presence of hookworm ova. Of those found positive, there was an average worm burden of 135 worms per person.

The results of the survey indicate that intestinal parasites are a problem of the white race only. The colored race showed less than two per cent positive for hookworm ova.

It is hoped that the results of this survey when it is completed will stimulate interest in the prevention of hookworm disease which is a significant public health problem in the white race of the state.

Felix J. Underwood, Executive Officer.
Jackson, January 10, 1933.

MISSISSIPPI HOSPITAL ASSOCIATION

The American Hospital Association is endeavoring to secure aid for hospitals from the Reconstruction Finance Corporation and the Mississippi State Hospital Association has been asked to cooperate. Dr. Bert W. Caldwell, Executive Secretary of the American Hospital Association, states:

"All hospitals are particularly interested in securing such aid as the Reconstruction Finance Corporation can extend and in increasing the powers of this corporation so that our hospitals may receive the financial assistance to carry them over until better times come again. We are all interested, too, in the removal of any restrictions

which the R. F. C. may have, or may at any time impose upon those welfare agencies—State, City, and County, governments receiving loans for relief—as the use of these loans so obtained may affect the payment of the hospital care given indigent patients.

"We believe that loans made by the R. F. C. to public welfare agencies and to political subdivisions for relief should include the payment for the care of indigent patients which our voluntary hospitals may furnish."

"On December 8, Senator Henrik Shipstead of Minnesota introduced into the Senate the following bill authorizing the Reconstruction Finance Corporation to make loans direct to hospitals within the same limitations as those made to commercial organizations.

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Reconstruction Finance Corporation is authorized and empowered to make loans under the Reconstruction Finance Corporation Act, as amended, to any public or private hospital organized under the laws of any State and upon the same terms and conditions, and subject to the same limitations, as are applicable in the case of loans to financial institutions specified in section 5 of such Act, as amended'."

"This bill was referred to the Committee on Banking and Currency on December 20. The members of this committee are as follows: Peter Norbeck, Chairman, South Dakota; Smith W. Brookhart, Iowa; P. Lee Goldsborough, Maryland; John G. Townsend, Jr., Delaware; Frederick G. Walcott, Connecticut; John J. Blaine, Wisconsin; Robert D. Carey, Wyoming; James E. Watson, Indiana; James Couzens, Michigan; Frederick Steiwer, Oregon; Duncan W. Fletcher, Florida; Carter Glass, Virginia; Robert Wagner, New York; Alben W. Barkley, Kentucky; Cameron Morrison, North Carolina; Thomas P. Gore, Oklahoma; Edward P. Costigan, Colorado; Cordell Hull, Tennessee; Robert J. Bulkley, Ohio."

Following is a letter written by Dr. Caldwell to the Honorable Atlee Pomerene, Chairman, Reconstruction Finance Corporation, on December 2:

"My dear Senator:

"The American Hospital Association desires to present for your consideration and for the consideration of the Reconstruction Finance Corporation the desirability of extending such assistance to the voluntary hospitals of the United States—those hospitals which are organized by philanthropic organizations and are supported by philanthropy and receive no support from taxation sources—as the powers of the Corporation may permit. In the event that under its present powers the Corporation is not permitted to render assistance to

the voluntary hospitals of this country it prays that the Corporation establish the necessary authority to afford in worthy instances the necessary relief to our voluntary institutions.

"The American Hospital Association represents in its membership 1,556 voluntary hospitals located in every city of the United States. They have been built, and maintained as public welfare agencies through the philanthropic support of generous citizens and of various religious denominations—Protestant, Catholic, and Jewish. Primarily organized to provide hospital care for all classes of our citizenry and devoting, particularly within the last two years, thirty-three and one-third per cent of their disbursements to the care of non-paying patients, these hospitals have admitted and cared for 5,500,000 out of the 7,156,000 patients admitted to all hospitals in this country during the last year.

"They find themselves called upon to take care of an increasingly large number of indigent patients and other patients who in better times would be able to contribute a part of the cost of their hospitalization and who are now unable to contribute anything. So serious is the situation that in 1931, 110 voluntary hospitals closed their doors for lack of funds to continue operation, and from January 1st to December 1st of the present year 162 of these hospitals have been forced to close.

"There is no public activity that is more necessary to the welfare of our people in these particularly severe times than the voluntary hospitals. Our public, tax-supported institutions are without exception crowded far beyond the limits of their bed capacities and are unable to care for all of the indigent sick who apply for admission. The voluntary hospitals have for the past two years exhausted their resources in taking over greatly increased burdens of the care of non-paying patients.

"In addition to the care of the patients admitted to the wards of our voluntary hospitals, these hospitals during 1932 have given medical attention to more than 22,000,000 patients in their dispensaries and out-patient departments, a vast majority of whom were cared for without any charge whatever, and the remainder at only a nominal charge averaging less than 25 cents per visit. So great is the contribution to the care of our indigent sick which our voluntary hospitals are making.

"They have not received in any form any assistance from national or governmental relief organization, and in the instance of practically every one of these voluntary hospitals the disbursements for the care of patients has greatly exceeded the income from all sources, leaving large deficits which have to be supplied through the generous

donations of philanthropic citizens. If there are any public welfare agencies that are entitled to favorable consideration for relief by the Reconstruction Finance Corporation or any other governmental relief organization, the voluntary hospitals—those hospitals supported by religious denominations and by our philanthropic citizenry—are entitled to that consideration.

"We are advised that the Reconstruction Finance Corporation has in one or more instances in providing relief funds for communities emphasized the condition that such funds be used for outdoor relief only and that none of the funds provided by the Corporation could be devoted to the care of indigent patients admitted to hospitals. Of all people, who by reason of his physical incapacity to earn a livelihood even if an opportunity to do so were afforded him, the patient who has to enter a hospital to be returned to health and made physically able to contribute to his own and to his family's support is entitled to assistance.

"The voluntary hospital system of this country—because of greatly reduced philanthropic support—because of the inability of the patients admitted to the institution to pay for their care—and because of increased burdens for the care of indigent patients that have been imposed upon our hospitals through the stress of present circumstances, is on the verge of a complete breakdown.

"The American Hospital Association, Senator, respectfully invites your attention and the attention of the Reconstruction Finance Corporation to the necessities of our voluntary hospitals and petitions the Corporation to

"First, take such action as will enable the Corporation to assist those deserving institutions among the voluntary hospitals which are urgently in need of financial aid, and

"Second, to establish the rule of your Corporation that any funds granted to communities or other authorities for relief may be used for the payment for the hospitalization of indigent patients in the same manner and form as for all forms of outdoor relief."

It is urged that State and Regional Hospital Associations as well as National Organizations bestir themselves in the matter at once.

CENTRAL MEDICAL SOCIETY

The annual meeting of the Central Medical Society was held at the Edwards Hotel, Jackson, on Tuesday, December 23, at 6 P. M.

Scientific Program:

Dr. Walter E. Sistrunk, Jr., of Dallas, Texas, discoursed at length on "The Management of Streptococcus Infections of the Female Genital Tract." His paper was discussed by Drs. Barks-

dale, Hays, Van Alstine, Hooper, Rembert and Sistrunk (closing).

An excellent paper was read by Dr. B. S. Guyton of Oxford on "The Discharging Ear." Discussion was by Drs. Adkins, Harris, V. D. Hagan, Hughes and Guyton (closing).

Fifty-seven members and guests were present. A resolution was offered by Dr. Willis Walley that the president be elected from various counties to alternate; seconded by Dr. D. W. Jones. Dr. Wall moved that the motion be tabled and the motion was carried. Therefore, Dr. Walley's motion was lost. Dr. Miller C. Henry's name was presented for membership and referred to the Board of Censors. Dr. Edmonson of Edwards and Dr. Harvey F. Garrison, Jr., were elected to membership.

SECRETARY'S ANNUAL REPORT

Receipts: 127 paid up members, \$762. Received from exhibitors at State Medical Meeting, \$100. Total, \$862.

Disbursements: Paid for entertainment of Ladies Auxiliary during State Medical Association, \$43.70, the secretary of the State Society, \$508, two dinners at the Robert E. Lee Hotel, \$66.26, stationery and stamps \$74.92.

Miscellaneous: Flowers, entertainers, secretarial work, etc., \$45.50. Federal tax on checks, 24c.

Total: \$738.52. This leaves in the bank for 1932, \$123.48.

We have in the bank a little more than this since a few members have paid their 1933 dues. Although the Medical Society has been poor this year, since the dues were reduced from \$4 to \$2, we have had including tonight three excellent meals and other entertainment and there will be left more in the bank at the end of this year than was left at the end of 1931.

The secretary recommends the election of a secretary and a treasurer to exist as separate officers; The purchasing of a mimeograph machine in order that programs may be sent to doctors in the vicinity of Jackson in addition to the membership with a minimum of secretarial aid; the adoption of a constitution and by-laws; securing of a new charter; the existence as a separate and self supporting organization of the Ladies Auxiliary; the nomination of at least two names for each office at the annual election (including secretary and treasurer) and let the chips fall where they may; that the election of the president alternate among the various counties that form the society.

The Society then proceeded to election of officers as follows:

President—Dr. John B. Howell.

Vice-President—Hinds, Dr. F. E. Rehfeldt; Madison, Dr. R. W. Smith; Rankin, Dr. W. H. Watson; Scott, Dr. W. C. Anderson; Simpson, Dr. J. L. Weimers; Yazoo, Dr. Gilruth Darrington.

Secretary.—Dr. Robin Harris.

Delegates to Mississippi State Medical Association—

Hinds, Delegates, Dr. N. C. Womack and Dr. H. F. Garrison, Sr., Alternates, Dr. J. S. McIntosh and Dr. L. W. Long; Madison, Delegates, Dr. A. P. Durfey, Alternate, Dr. I. Edwards; Rankin, Delegate, Dr. J. B. Ainsworth, Alternate, Dr. R. N. Whitfield; Simpson, Delegate, Dr. Ros. Walker, Alternate Dr. W. W. Diamond; Scott, Delegate, Dr. R. B. Austin, Alternate Dr. A. A. Austin; Yazoo, Delegate, Dr. J. B. Anderson, Alternate, Dr. O. H. Swayze.

Program Committee—Dr. W. E. Noblin; Dr. Harvey Garrison, Sr.; Dr. G. W. F. Rembert; Dr. R. W. Hall; Dr. Robin Harris.

Robin Harris, Secretary.

Jackson,
January 7, 1933.

DE SOTO COUNTY MEDICAL SOCIETY

At a recent interesting meeting of the De Soto County Medical Society, the following officers were elected to serve for 1933:

President—A. J. Weissinger.

Vice-President—J. M. Wright.

Secretary-Treasurer—L. L. Minor (re-elected).

Delegate to Mississippi State Medical Association—A. L. Emerson; Alternate, A. J. Weissinger.

The president named L. L. Minor as County Editor for the New Orleans Medical and Surgical Journal.

L. L. Minor, Secretary.

Memphis, Route 4,
January 9, 1933.

EAST MISSISSIPPI MEDICAL SOCIETY

The annual meeting of the East Mississippi Medical Society was held on the mezzanine floor of the Lamar Hotel, Meridian on Thursday afternoon, December 15, with Dr. J. S. Hickman, president, presiding.

The following scientific program was rendered:

1. Treatment of Burns.—Dr. R. G. Hand, Quitman.

Discussed by Drs. M. J. Lowry, W. J. Anderson, H. S. Gully, and Dudley Stennis.

2. Should the Insane Asylum be Relieved of the Congestion: Dr. A. L. Monroe of the Mississippi State Hospital, Jackson.

Discussed by Drs. W. J. Cavanaugh, O. A. Schmid, M. J. L. Hoyer, G. L. Arrington, W. H. Banks, H. S. Gully, D. V. Galloway, D. W. Walker, and J. S. Hickman.

3. Multiple and Solitary Cysts of the Kidney—Report of Two Cases—Dr. W. J. Anderson, Meridian.

Discussed by Drs. J. T. Bailey and W. R. Holladay.

Dr. Henry G. Rudner, Memphis, Tenn., who was to appear on the program was unable to attend on account of acute illness in his family. The secretary was instructed by a unanimous vote to

send our sympathy and regrets with wishes for a speedy recovery to Dr. Rudner, and extend an invitation to him to appear on our next program.

Three new members were elected to membership in the society as follows: Dr. O. A. Schmid of the Mississippi State Hospital, Meridian; Dr. D. V. Galloway of the Lauderdale County Health Department, Meridian; and Dr. W. C. Norris, Quitman.

The secretary was instructed by a unanimous vote to write to the Commonwealth of New York, expressing thanks for support and cooperation in securing an instructive medical program in 1932 and asking continued cooperation and support for the year of 1933.

Dr. T. G. Cleveland, vice-president for Lauderdale County, appointed the following committee to arrange for this program: Drs. D. V. Galloway, Chairman, T. D. Bourdeaux, H. L. Arnold, W. J. Anderson.

The following officers were elected for 1933:

President—Dr. Dudley Stennis, Newton.

Vice-Presidents—For Lauderdale, Dr. T. G. Cleveland; for Newton, Dr. W. J. Pennington; for Neshoba, Dr. W. R. Hand; for Winston, Dr. E. L. Richardson.

Secretary—Dr. T. L. Bennett, Meridian.

Delegates—For Lauderdale, Dr. M. J. L. Hoyer, Alternate, Dr. G. L. Arrington; for Newton, Dr. Dudley Stennis, Alternate, Dr. T. E. Jarvis; for Neshoba, Dr. W. H. Banks, Alternate, Dr. A. L. Majure; for Winston, Dr. E. L. Richardson, Alternate, Dr. W. B. Hickman.

Censors—For Lauderdale, Dr. H. F. Tatum; for Newton, Dr. S. A. Majure; for Neshoba, Dr. W. J. Stribling; for Winston, Dr. T. F. Kilpatrick.

Medico-Legal Adviser—Dr. I. W. Cooper, Meridian.

The next meeting will be held in Meridian, at the Lamar Hotel, February 16.

T. L. Bennett, Secretary.

Meridian,
January 9, 1933.

HARRISON-STONE-HANCOCK COUNTIES MEDICAL SOCIETY

Just a Yuletide greeting from your President and Secretary and with it goes a genuine appreciation of your loyalty and good fellowship which meant so much to us.

Our Society is good. Our enrollment in membership is above the average, but we should have more new members. Our programs are splendid; let us make them more interesting. Our new officers are fine men; let us help them to make 1933 a most successful year.

C. M. Shipp, President;
E. A. Trudeau, Secretary.

JANUARY MEETING

Will be held at the King's Daughters' Hospital, Gulfport, January 4, 1933, at 7:30 P. M.

Subject—To be announced.

Dues for 1933 are now due.

Biloxi,

December 29, 1932.

ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY

The monthly meeting of the Issaquena-Sharkey-Warren Counties Medical Society was held on Tuesday, January 10, 7 P. M., at the Hotel Vicksburg. After a table luncheon, Drs. S. W. and W. E. Johnston presented moving pictures as follows:

1. Hernioplasty for Strangulated Ventral Hernia.

2. Posterior Colporrhaphy.

The remainder of the meeting was devoted to a discussion of the business affairs of the profession and was opened by Dr. E. F. Howard, who presented a careful study of the Report of the Committee on the Costs of Medical Care. Numerous matters of interest to the profession in a business way were generally discussed.

Report of the Secretary for the year of 1932 showed membership as follows:

Issaquena County, 3; Sharkey County, 6; Warren County, 32; Life members, 1; Honorary members, 4.—Total 46, a gain of 2 over 1931. There were 11 regular meetings and one special meeting. The average attendance at meetings was 22 members and four visitors. Thirty members presented papers during the year, an average of 66.6 per cent. Five visitors presented papers.

There are within the jurisdiction of the Society licensed physicians, non-members as follows: Issaquena, None; Sharkey, 7; Warren, 8.

The Treasurer's report showed that the financial affairs of the Society are in good condition.

Resolutions of respect on the death of Dr. John E. Quidor were adopted.

The next meeting of the Society will be held at the Hotel Vicksburg on Tuesday, February 14, at 7 P. M.

ADAMS COUNTY

Miss Matty L. Rife and Dr. Henry Maxwell Smith, Natchez, were married December 27. Miss Rife was past president of the Adams County Nurses Association. Dr. Smith practices medicine in Natchez and is also interested in real estate and planting in Louisiana.

Mr. George Dicks, a student at the Medical School of Vanderbilt University, spent the Christmas vacation with his parents, Dr. and Mrs. J. W. D. Dicks.

The Chamberlain-Rice Hospital was the setting for a delightful entertainment December 23, when Mr. Ferriday Byrnes complimented the nurses with

a supper party, which was also attended by the medical staff.

L. Wallin, Editor.

Natchez,
January 10, 1933.

ALCORN COUNTY.....	Missing
AMITE COUNTY.....	Missing
ATTALA COUNTY.....	Missing
BENTON COUNTY.....	Missing

BOLIVAR COUNTY

Dr. L. B. Austin, Rosedale, was called to the bedside of his sister near Vicksburg, during December and we are glad to report her recovery from pneumonia.

Dr. S. W. Colquitt, Beulah, who was confined to his bed for several days with the flu, is out again.

Unfortunately your correspondent is unable to give any further news from Bolivar County as he has been unable to hear from any of the doctors in the neighboring towns. If any of these gentlemen will be kind enough to drop him a line stating any happenings of interest either to themselves or others he will be glad to incorporate the same in his report.

C. W. Patterson, Editor.

Rosedale,
January 9, 1933.

CALHOUN COUNTY.....	Missing
CARROLL COUNTY.....	Missing
CHICKASAW COUNTY.....	Missing
CHOCTAW COUNTY.....	Missing
CLAIBORNE COUNTY.....	Missing
CLARKE COUNTY.....	Missing

CLAY COUNTY

It has been several months now since reporting any news from Clay County, but there is always an alibi when neglecting one's duty. First, I wish to say we have had no news of interest to report or, at least, I have been unable to get news items from the doctors in this county other than a general complaint of continued hard times and no money to boost up the spirits.

The Northeast Mississippi Thirteen County Medical Society held its regular quarterly meeting in Aberdeen on December 20, with not more than twenty-five members in attendance, when there should have been around one hundred, but snow and ice with bad roads prevented the usual membership attending. We were given a very splendid banquet by the Aberdeen physicians and there were a few interesting papers read and discussed. The same officers for 1933 were elected with the exception of the president, Dr. F. L. McGahey of Calhoun City.

Dr. J. E. Ellis, West Point, left for New Or-

leans on January 2, where he will be for the next four months doing post-graduate work and we all wish for him a successful course.

Dr. and Mrs. C. W. Emerson, Hernando, spent part of the Christmas Holidays with the writer and family.

As to the community hospital project in every county, will say I do not favor this. I do not believe such a plan is feasible and I can not see how they could be financed, as practically all of the small hospitals now operating in the State are running at a loss.

Lon W. Dotson.

West Point,
January 9, 1933.

COAHOMA COUNTY.....	Missing
COPIAH COUNTY.....	Missing
COVINGTON COUNTY.....	Missing

DESOTO COUNTY

Dr. and Mrs. William B. Kountz, St. Louis, Mo., visited Mrs. Kountz's parents, Dr. and Mrs. A. J. Weissinger, recently. Dr. Kountz was granted a leave of absence by the medical college of which he is an associate professor of medicine, for a year. Six months was spent in Europe and six months in Egypt in research work. Dr. and Mrs. Kountz gave many interesting accounts of their trip abroad.

Mrs. Edward Gale, Dr. Weissinger's other daughter, lives in Hernando. She is the mother of a thirteen-months-old baby which is the delight of the whole family.

The doctor's son, James Scott, is in business with his father in Hernando. Some time ago he married Miss Katherine Sanders of Walls.

The Mid-South Post-Graduate Medical Assembly's forty-ninth annual meeting will convene at Hotel Peabody, Memphis, Tennessee, February 14 to 17, 1933. A member of noted medical men will address this group. Membership in the assembly is open to doctors in all parts of the South. Many Mississippi doctors expect to attend this meeting.

L. L. Minor, County Editor.

Memphis, Tenn., Route 4,
January 9, 1933.

FOREST COUNTY

I can't say that we have had very much to report from Forest County this month. The following doctors have had the "flu": Dr. J. P. Culpepper, Jr., Dr. C. C. Hightower, Dr. S. E. Bethea, Dr. H. G. Cook and Dr. H. C. McLeod. I am glad to state that these doctors have completely recovered and are back on the job. The flu situation seems to be improving, however, there

has been several deaths from pneumonia following flu.

We doctors in Hattiesburg believe that times are getting better as some of the doctors who have been smoking Prince Albert tobacco have been seen smoking cigars here of late. It might be that these are Christmas presents.

That is all the news I have for this time. No marriages among the doctors. No births and no deaths.

C. C. Buchanan, County Editor.

Hattiesburg,
January 11, 1933.

FRANKLIN COUNTY	Missing
GEORGE COUNTY	Missing
GREEN COUNTY	Missing
GRENADA COUNTY	Missing
HANCOCK COUNTY	Missing
HARRISON COUNTY	Missing

HINDS COUNTY

The Staff of the Jackson Infirmary met December 27, 6 P. M., at which time a delicious dinner was served. After the dinner the members assembled in the library where a good program was enjoyed by all.

The Staff of the Baptist Hospital met January 3, at which time the usual good meal was served and the program rendered was exceedingly interesting and instructive. These meetings are always attended by a large crowd.

The Central Medical Society held its meeting at the Edwards Hotel, December 20. We were greatly honored by having with us Dr. Sistrunk, of Dallas, and Dr. Guyton, of Oxford, both of whom read interesting and instructive papers.

Dr. Julius Crisler has just returned from California where he went to be with his wife, who is sick, and to bring her back to Jackson. We hope for Mrs. Crisler a speedy recovery.

Dr. and Mrs. Temple Ainsworth are at home in Jackson following their honeymoon. They were married December 4.

Dr. and Mrs. Brister Ware, who were married December 11, are at home in Jackson.

Dr. T. J. Crofford, who has been confined to bed at the Baptist Hospital for several months, expired December 15.

Wm. F. Hand, County Editor.

Jackson,
January 5, 1933.

HOLMES COUNTY

At a called meeting of the physicians of Holmes County, a regular staff for the Holmes County Community Hospital was organized on the second Tuesday in December, with Dr. R. M. Stephenson, Lexington, as chairman, and Dr. C. H. In-

gram, Pickens, as secretary. The second Tuesday night in each month was selected as the regular meeting time, and the secretary has sent out the following letter to all the physicians in the county, relative to the January meeting:

"Pickens, Mississippi,
"Jan. 6, 1933.

"Dear Doctors:

"On the second Tuesday, Jan. 10, 1933, at 7:30 P. M., there will be a regular monthly meeting of the Holmes County Community Hospital Staff, at the hospital. By virtue of residence, you are a member. We shall expect and look for you.

"It is the desire of the president and all official members of the staff to make this and all subsequent meetings of the utmost interest to each and every one.

"Our prime purpose is to standardize our hospital and these monthly meetings constitute one of the requirements.

"It is purposed and intended to divert all spare time to a discussion of cases, both medical and surgical; also to make of the staff somewhat an official county medical society, wherein all may feel free to discuss anything of interest to the organization, and the fraternity.

"We shall be looking happily forward for your presence and any words of help and cheer which you may speak.

"Fraternally,
R. M. Stephenson, Pres.,
C. H. Ingram, Secy."
R. C. Elmore, County Editor.

Durant,
January 9, 1933.

HUMPHREYS COUNTY	Missing
ISSAQUENA COUNTY	Missing
ITTAWAMBA COUNTY	Missing

JACKSON COUNTY

At the regular meeting of the staff of the Jackson County Hospital, held at the hospital, Thursday evening, January 12, the following officers for the ensuing year were elected: S. B. McIlwain, President; R. C. Eley, Vice-President; J. F. Busey, Secretary-Treasurer.

Several items pertaining to the year's work were discussed, mostly taxes.

After the meeting adjourned delicious coffee and pie were served by the nurses and the doctors wondered how the nurses had managed to stay single since they are such good cooks.

S. B. McIlwain, County Editor.

Pascagoula,
January 13, 1933.

JASPER COUNTYMissing
 JEFFERSON COUNTYMissing
 JEFFERSON DAVIS COUNTY.....Missing
 JONES COUNTYMissing

KEMPER COUNTY

At the annual election of officers of Kemper County Medical Society held January 2, 1933, Dr. C. M. Gully was elected president; Dr. V. M. Creekmore, secretary. Dr. Creekmore was elected delegate to the State Medical Convention.

The friends of Dr. and Mrs. T. H. Wall, Scooba, regret to learn of the death of Mrs. Wall's mother, Mrs. Madison, of Scooba.

Dr. J. L. Hasie of Electric Mills, returning from a recent deer hunt, reports that he almost got his buck, and learned a heap about the Club's kangaroo court.

A. M. McCarthy, County Editor.

Electric Mills,
 January 9, 1933.

LAFAYETTE COUNTYMissing
 LAMAR COUNTYMissing

LAUDERDALE COUNTY

Mr. and Mrs. George Nuttall Dyson have announced the marriage of their cousin, Miss Jeanette Hamilton, to Drs. Hewitt Hasselle Robinson, on Sunday, the first of January, 1933, at Stanford Memorial Church, Stanford University California. Dr. and Mrs. Robinson will be at home after the fifteenth of January at 1508 Twenty-fourth Avenue, Meridian, Mississippi. Dr. Robinson is the elder son of Dr. E. E. Robinson, Meridian.

If it is pardonable for me to write about myself, I received the appointment under the new city administration for city physician.

Our little, ONLY daughter, Frances Milbrey Burt, will celebrate her eighth birthday anniversary, January 18.

The staff of Dr. Anderson's Hospital is to hold a meeting this week.

Having been so occupied taking over duties of city physician, I have failed to secure further data.

With best wishes for the new year.

Chas. T. Burt, County Editor.

Meridian,
 January 10, 1933.

LAWRENCE COUNTYMissing
 LEAKE COUNTYMissing
 LEE COUNTYMissing

LEFLORE COUNTY

Dr. L. A. Barnett attended the annual Health Officers Conference in Jackson on December 12.

Dr. and Mrs. W. D. Wilson, Schlater, were called to Chicago on account of the serious illness of their son, Walter, who had pneumonia. He has recovered, and they were able to return for the Xmas holidays.

Dr. Tate Carl received his M. D. degree December 17 from the University of Tennessee School of Medicine. He will remain with his parents in Greenwood until February, when he returns to begin an internship at the Memphis General Hospital.

Dr. Fred Sandifer of the University of Chicago, and Gwin Meunger of Tulane spent the Xmas holidays with home folks.

Dr. J. P. Kennedy spent Christmas day with his father's family at Pinola.

Dr. G. Y. Gillespie, Jr., also spent Christmas with his father, Dr. G. Y. Gillespie, at Duck Hill.

Dr. Ruth Dean, Lewes, Delaware, spent the week of Christmas with her grandmother in Greenwood.

Dr. T. R. Montgomery, Memphis, Tenn., spent December 27 in Greenwood with his mother, Mrs. Julia Montgomery, and sister, Mrs. I. L. Jones.

Dr. Robert Dickins, Greenville, spent Monday, December 26, with his father, Dr. W. B. Dickins, and family.

Dr. Robert McLean, New York City, was in Greenwood January 2, greeting his friends of his boyhood. His father was the late Dr. J. L. McLean of Greenwood, and Memphis, Tenn.

Drs. A. M. Gill, Sidon, and T. M. Riddell, Swif-town, were recent visitors to Greenwood.

We are glad to report that Dr. W. G. Tabb has recovered from an attack of influenza.

W. B. Dickins, County Editor.

Greenwood,
 January 5, 1933.

LINCOLN COUNTYMissing
 LOWNDES COUNTYMissing
 MADISON COUNTYMissing
 MARION COUNTYMissing
 MARSHALL COUNTYMissing

MONROE COUNTY

Well "thirty-two" is but a memory—to many of us it may have been little more than a nightmare. I wonder what "thirty-three" has in store? Personally, I dare not express my fears in words. One who has tried to direct a relief campaign, as have I, for several months and consequently KNOWS the tragic condition of the masses as I do, can not feel other than depressed. I simply can see no indication of better things in the near future. Besides this I KNOW that the masses are thinking ugly thoughts. I am convinced that only a leader with improper motives or wrong conceptions of the condition, is needed

to start something that can not be controlled. There is something fearfully wrong—the people know that much, but they can not understand. Oh, for leaders, local, state and national, with understanding, sympathy and patriotism. In this section of the state the doctors are on the ragged edge. They are not receiving enough pay to meet overhead expenses. They are living on the past or are living on the future and the standard of living has fallen to an unthinkable level. What, in heaven's name, can be done? It is time for US to THINK (I wonder if we can think?).

Our society held its final meeting for last year at Aberdeen on the twentieth ult. The earth was covered with sleet—had been for days. The crowd was very small—the smallest in our history. But the welcome extended by the doctors living there and the people was beautiful indeed. How I wish everybody knew and might enjoy the hospitality of old Monroe County. There are thirteen counties in our territory, but more than one-fourth of our meetings are held in Monroe. We would not have it otherwise. We expect in early summer to have the society and many of our friends beyond our borders with us at old Greenwood Springs. Greenwood Springs was once a very noted and fashionable resort in north Mississippi. We hope to give every one who comes a thrilling time. We elected Dr. F. L. McGahey of Calhoun City, to be our president for this year—1933. We feel that we have honored ourselves in thus honoring him and we expect great things under his leadership for the coming year.

But I feel that I would be derelict if I should not say a word of praise for our president immediately preceding him—Dr. W. C. Spencer of Tupelo. Dr. Spencer is one of our "grand old men"—one who, if "copied well might be a pattern for these younger years." Dr. Spencer's health has not been up to the standard for several months. Nevertheless he served us well and did honor to his office and us while occupying the chair as president of the largest and best society in the state. We are happy to have him with us as one of our most highly respected members.

I regret to have to chronicle the rather serious illness of Dr. T. D. Summerford's wife. She is in the hospital at Amory at this time. We hope for a speedy recovery and assure her and each member of her family that they have our interest and sympathy.

Wedding bells rang recently in our territory. Dr. Robert Christian, who was reared, largely, in Amory and who has lived at Baldwyn until a few months ago, celebrated Christmas in the finest way. I regret that for the present the name

of his bride escapes my memory. I have known for some months that such a step was in the offing. Dr. Christian is now on the staff of one of the veterans' hospitals in one of the Carolinas. We wish for them all joy and prosperity.

In the words of Lowell Thomas, "So long" for the present.

G. S. Bryan, County Editor.

Amory,

January 5, 1933.

MONTGOMERY COUNTYMissing

NESHOBA COUNTY

The doctors of this locality have been very busy for the past few weeks owing to the prevalence of the recent influenza epidemic. There seems to be an unusually large number of cases of pneumonia.

Dr. C. H. Harrison was confined in bed for several days on account of a case of flu. We are glad to report that at this writing he is up and seems to be having a satisfactory convalescence. Dr. W. J. Stribling and Dr. W. L. Watkins are also reported to be on the "ailing" list.

Dr. J. S. Hickman, formerly of Philadelphia, but now connected with the State Hospital in Jackson as a member of the staff spent a few of the Christmas holidays in Philadelphia. We miss him from among our ranks and are always glad to have him visit us.

Dr. W. R. Hand the writer, reports a case of tularemia, patient's condition satisfactory.

Dr. R. G. Hand and wife of Quitman, visited their parents in Philadelphia during the Christmas holidays. He reports a very satisfactory duck hunt in Louisiana. Although an amateur at duck hunting he had no difficulty in securing the bag limit each day he was out.

W. R. Hand, County Editor.

Philadelphia,

January 7, 1933.

NEWTON COUNTYMissing

NOXUBEE COUNTYMissing

OKTIBBEHA COUNTYMissing

PANOLA COUNTYMissing

PEARL RIVER COUNTYMissing

PERRY COUNTYMissing

PIKE COUNTYMissing

PONTOTOC COUNTY

1933 was ushered in like a crisp spring morning. We are having quite an epidemic of flu in this section of the state. The most of it is of a mild type with very few fatalities and those are in real old people. Up to date we have had very little pneumonia.

The many friends of Dr. J. R. McDaniel of

Steele, Mo., will regret to hear of his wife's death on January 5. Dr. and Mrs. McDaniel were born and reared in Pontotoc County and moved to Missouri about eleven years ago.

Here's wishing everybody a prosperous and happy new year.

R. P. Donaldson, County Editor.

Pontotoc,

January 7, 1933.

PRENTISS COUNTY

At the regular staff meeting of the Northeast Mississippi Hospital, Monday night, December 5, the clinical program was conducted by Drs. W. V. Davis and R. B. Cunningham, the former reading a paper with case report on acute anterior poleomyelitis, and the latter a paper and case report on hypertrophic pyloric stenosis.

Dr. S. L. Pharr who has been convalescing from an appendicitis operation returned to his office today and is again seeing his patients.

Dr. L. L. McDougal, accompanied by Mrs. McDougal, left December 29 for New Orleans where Dr. McDougal is taking post-graduate work. He was awarded a fellowship under the Commonwealth Fund plan.

Drs. W. H. Sutherland, W. H. Anderson, L. L. McDougal and R. B. Cunningham were among the victims of the recent "flu" epidemic.

R. B. Cunningham, County Editor.

Booneville,

January 7, 1933.

QUITMAN COUNTY	Missing
RANKIN COUNTY	Missing
SCOTT COUNTY	Missing

SHARKEY COUNTY

Dr. and Mrs. H. S. Goodman, Cary, report a delightful motor trip to their old home in Virginia, attending a family reunion.

Dr. and Mrs. E. B. Stribling, Rolling Fork, are the proud possessors of a fine grand-daughter. This is the first Stribling grandchild.

W. C. Pool, County Editor.

Cary,

January 11, 1933.

SIMPSON COUNTY

Our Christmas and New Year holidays are over and all of us have started out trying to make this new year, 1933, a better year. I don't mean we didn't have plenty of work in 1932, but I mean that we got less for it than any other year of my practice, going by percentage, and I have been a doctor for thirty-two years.

Our county has had almost an epidemic of influenza which luckily has not been very severe. There has also been a number of cases of pneumonia with only a few fatalities.

The Sanatorium doctors report that influenza has been very prevalent among the patients there, but no case has resulted seriously.

The hospital was crowded for a few days during the holidays with victims of accidents and otherwise.

Dr. R. E. Giles, Mendenhall, county health officer, thinks that he has finished the most complete vaccination, both typhoid and diphtheria, the county has ever had.

Dr. E. L. Walker attended a medical meeting held in Jackson in December.

E. L. Walker, County Editor.

Magee, January 9, 1933.

SMITH COUNTY	Missing
STONE COUNTY	Missing
SUNFLOWER COUNTY	Missing
TALLAHATCHIE COUNTY	Missing
TATE COUNTY	Missing
TIPPAH COUNTY	Missing
TISHOMINGO COUNTY	Missing
TUNICA COUNTY	Missing
UNION COUNTY	Missing
WALTHALL COUNTY	Missing
WARREN COUNTY	Missing

WASHINGTON COUNTY

A special called meeting of the Staff of the King's Daughters' Hospital at Greenville, was held January 4, and the following motion was unanimously passed—that Dr. A. G. Payne be appointed as a committee of one to go before the Apportioning Board of the Reconstruction Finance Corporation Relief Fund to present the interests of the physicians with reference to dispersion of said funds in Washington County, and that any action taken shall not be rendered as a precedent with regard to future relations and shall be regarded only as an emergency measure.

Dr. T. F. Wilson of Arcola, who has been a patient at the King's Daughters' Hospital since December 26, is steadily improving and will be able to go home in a few days.

Dr. T. J. Barkley of Isola brought his wife to the King's Daughters' Hospital, December 26. Mrs. Barkley has been critically ill, but is greatly improved and doing very nicely now.

Dr. H. A. Gamble had his tonsils removed several days ago. He is getting along nicely much to the delight of his many friends.

The Mid-South Post Graduate Medical Association meets in Memphis, February 14-17. These meetings have developed into real post-graduate courses and are well worth attending. It is earnestly urged that every doctor in Washington County attend.

J. G. Archer, County Editor.

Greenville, January 5, 1933.

WAYNE COUNTY.....Missing
 WEBSTER COUNTY.....Missing
 WILKINSON COUNTY.....Missing

WINSTON COUNTY

Dr. E. L. Richardson is just out from a spell of flu. We are glad he seems to be improving.

Dr. W. W. Hickman of south Mississippi, who has a saw mill practice, is in Louisville on business. Dr. W. B. Hickman, his son, is substituting for his father while he is here.

Dr. S. W. Pearson is in Memphis on business this week.

The writer had the honor to participate in an opossum dinner with Dr. W. W. Parks last week. Besides the usual hospitality of him and his fine family, we showed our appreciation by eating a very heavy meal.

We know but little news of interest to our vast number of doctor friends, as I presume hard collections and depression are about all we hear.

The Winston County Medical Fraternity will meet next Thursday, January 10, at 3 P. M. We hope to have all members present.

M. L. Montgomery, County Editor.
 Louisville, January 5, 1933.

YALOBUSHA COUNTY.....Missing
 YAZOO COUNTY.....Missing

DEATHS OF MISSISSIPPI PHYSICIANS—1932

Statistics furnished by Dr. Felix J. Underwood,
 Executive Officer of the Mississippi State Board

Name	Residence	Cause of Death	Date	Age
Armstrong, M. C.	Topisaw	Organic hearth trouble	June 25	50
Barnette, Ben J.	Indianola	Cirrhosis of liver	Apr. 20	60
Beacham, W. D.	Hattiesburg	Chronic heart condition	June 23	58
Booth, M. A. (Col.)	Greenwood	Suicide	Oct. 19	44
Brewer, W. C.	Columbus	Killed in pistol duel on street	Nov. 28	54
Bridges, R. R.	Crystal Springs	Carcinoma of the prostate gland	Feb. 26	77
Buie, N. H.	Fayette			66
Butler, D. P.	McCall Creek	Cerebral hemorrhage, hyperten- sion. Result of injuries in automobile accident	Jan. 13	61
Carlisle, Devro	Meridian	Skull fracture—automobile ac- cident	May 19	83
Carter, P. A.	Hattiesburg		Dec. 2	61
Clark, Sam	Brooksville		Dec. 17	74
Cook, Mrs. Malinda G.	Charleston	Old age—Pyelitis	Oct. 9	86
Cowart, Eleazor Joseph	Hendersonville (Lyman—Res.)	Carcinoma of Pancreas	Mar. 14	57
Crump, R. P.	Memphis, Tenn.			65
Dampeer, J. M.	Crystal Springs	Sepsis following pelvic abscess. Probably recurrence of can- cer of lower bowel	July 14	64
Darden, S. J. T.	New Albany	Appendicitis and general peri- tonitis	Oct. 5	55
Doss, W. L.	Columbus	Chronic endocarditis	Jan. 22	61

of Health, show that thirty-nine Mississippi physi-
 cians died during the year of 1932 as compared
 with 52 in 1931 and 52 in 1930. The average
 age at time of death for the 38 whose ages were
 known was 64 or three years higher than last
 year. The distribution by decades for the past
 two years were as follows:

Age	1931	1932
30-40	1	0
40-50	7	3
50-60	15	11
60-70	11	12
70-80	13	8
80-86	4	4
Unknown	1	1
	<hr/> 52	<hr/> 39

It will be seen with encouragement that in spite
 of numerous statements to the contrary, all physi-
 cians, at least Mississippi physicians, do not die
 young.

As last year, diseases of the heart and blood
 vessels lead as causes of death, 14 or 36 per cent
 being attributed in whole or in part to such dis-
 eases. But even this high figure is considerably
 less than last year when the percentage of such
 deaths was 45 per cent. Four deaths were attrib-
 uted directly to malignant disease and in one
 malignancy was a contributory cause, an inci-
 dence of 13 per cent, one per cent higher than
 last year. Pneumonia, tuberculosis and nephritis
 were each named twice. Four deaths were due to
 violence or accident. The list follows:

Name	Residence	Cause of Death	Date	Age
Ford, Theodore B.	Columbia	Myocarditis; influenza	July 21	83
Heath, Thos. A.	Shiloh	Pneumonia—Double lobar	Jan. 17	75
Higdon, Robert E.	Brookhaven	Uremia—Chronic Nephritis	Jan. 24	59
Hogan, C. H.	Sartartia	Chronic nephritis; mitral regurgitation	Aug. 18	52
Holmes, C. B.	Silver City	Accidental drowning	July 21	68
Hutchinson, Clarence E.	Ocean Springs	Apoplexy—Contributory cause—Hypertension	Apr. 24	50
Lucas, E. C.	Ebenezer	Arteriosclerosis; Cerebral softening	Jan. 9	71
McInnis, J. M.	Brooklyn		Nov. 22	64
Marsalis, W. I.	Centreville	Acute dilatation heart; coronary thrombosis; chronic myocarditis; hypertension	May 28	59
Montgomery, J. W.	Columbia	Lobar pneumonia	Jan. 9	50
Murphy, Wm. Edwin	Pass Christian	Pulmonary tuberculosis. Contributory cause, tuberculous laryngitis	Aug. 6	40
Pace, R. D.	Meridian	Angina pectoris	Aug. 20	68
Rowland, Robert Walter	Sanatorium	Tuberculosis of lungs. Contributory cause—T. B. of the larynx	May 9	48
Smith, C. W.	Glendora	Aneurism; Arteriosclerosis	Feb. 22	51
Stone, Owen W.	Brooklyn, N. Y. (Army Hospital)		Feb. 29	81
Shamburger, James M.	Toomsaba	Sudden death. Probably heart attack—no physician present	Jan. 1	76
Turnipseed, J. A.	McCool	Cancer of sigmoid. Contributory cause, partial paralysis	July 10	65
Walton, John H.	Como	Cerebral hemorrhage	Nov. 20	79
Weeks, J. D.	Ackerman	Heart block. Sudden death. Arteriosclerosis	Nov. 24	75
Wilkinson, John D.	Gulfport	Hypertrophy of heart and aortitis; cholecystitis	May 21	69
Williams, J. H.	Lake Providence (Louisiana)		Oct.	
Wright, Edwin	Sardis	Carcinoma upper right lung and pleura	Sept. 27	70

DR. T. J. CROFFORD

RESOLUTIONS

WHEREAS, life, with its ever changing cycle, brings experience fraught with happiness and laden with sadness, and

WHEREAS, the passing of mortals from God's foot-stool is to be expected in the course of events, and though mindful of the certainty of such a translation, we are never prepared to surrender our loved ones at the behest of the Supreme Being, and

WHEREAS, life is dear to youth, with its unfilled hopes, precious to mid-life with its tempering responsibilities, and even cherished by old age, with its consciousness of days well spent; yet when life is cut off there irresistably comes the thought that life is denied its opportunity, and

WHEREAS, an estimate of one's character is very apt to be based by personal regard and a true evaluation is lost in the maze of circumstances, still to all, who knew him, comes the realization that there has left us a man, worth while, when our fellow practitioner and friend, Doctor Thomas J. Crofford fell asleep; and

WHEREAS, in this man's daily life there was exemplified those virtues that caused him to practice in and out of season every duty; made him an obedient son, a faithful husband, a solicitous father, an ethical practitioner of the healing art, an upright citizen, and a gentleman, and

WHEREAS, it is not to be forgotten that posthumous glory soon sinks into forgetfulness, yet the verities, for which Doctor Crofford's life was a shining example, will live long after he has

slipped into the tongueless silence of a dreamless sleep, and

Whereas, we are not unaware that expressions of condolence often fall far short of their intended meaning, and that words of sympathy are many times empty verbiage, yet those of us, who had the rare fortune to know and be associated with our departed confrere, do desire thus to express our estimate of this co-worker and friend: "For tho' from out Bourne of Time and Place

The floods may bear me far,
I hope to see my Pilot face to face,
When I have crossed the bar."

THEREFORE, Be it resolved by the Staff of the Mississippi Baptist Hospital, Jackson, Mississippi, in regular meeting, January 3rd, 1933, that the above resolutions be spread upon the minutes, and a copy be forwarded to the family of our departed friend.

J. P. Wall
W. G. Wilde
H. C. Sheffield.

Adopted by the staff of the Mississippi Baptist Hospital, January 3, 1933.

Lawrence W. Long, Secretary.

DR. JOHN E. QUIDOR

Dr. John E. Quidor, Vicksburg, aged 53 years, died January 5 of portal cirrhosis and esophageal hemorrhage.

Dr. Quidor had been connected with the Medical Department of the United States Corps of Engineers in the Vicksburg, Mississippi, river district since 1929. He is survived by his wife, Mrs. Edith Quidor, two sons, John H. and James S., both of Vicksburg, one daughter, Mrs. Nina Sicard of New Orleans, and his mother, Mrs. Nancy N. Stricklin of Little Rock, Arkansas. Internment was at the old home in Jacksonville, Arkansas.

Dr. Quidor received his degree in medicine from the University of Arkansas in 1905. He was licensed to practice medicine in Mississippi in 1930. He was a member of the Issaquena-Sharkey-Warren Counties Medical Society, the Mississippi State Medical Association, and a fellow of the American Medical Association.

RESOLUTIONS

WHEERAS; God in His infinite wisdom has seen fit to take from amongst us our brother physician, Dr. John E. Quidor, and

WHEREAS; he was a loyal member of the Issaquena-Sharkey-Warren Counties Medical Society, a physician of ability, a gentleman of character beloved by his friends and admired and respected by all who knew him.

THEREFORE, be it resolved that the Issaquena-Sharkey-Warren Counties Medical Society does

deeply regret his untimely passing and does hereby extend to his wife and family its deep and sincere sympathy, and

FURTHER, be it resolved that a copy of this resolution shall be included in the minutes of the Society and copies forwarded to his family and to the press.

Respectfully submitted,

Edley H. Jones, Chairman
L. J. Clark, Committee.

Resolutions approved by the Issaquena-Sharkey-Warren Counties Medical Society January 10, 1933.

Attest: Leon S. Lippincott, Secretary.

LEST WE FORGET THEIR GOOD WORKS



WILLIAM M. COMPTON
Holy Springs, Mississippi

President, Mississippi State Medical Association,
1871-2.

Wm. M. Compton was born at Madisonville, Ky., August 4th, 1833, and died at his home near Holly Springs, Miss., of yellow fever, October 3rd, 1878. Graduating from Jefferson Medical College of Philadelphia, he settled in Marshall County, Miss., dividing his time between the practice of medicine of the care of his plantation, and in 1861 was commissioned staff-surgeon of the brigade of 60-day state troops under General James L. Alcorn. In 1862 he was commissioned surgeon C. S. A. and assigned to duty with the Second Texas Infantry. During his service with this command it was his fortune to perform one of the few successful hip-joint amputations recorded in the annals of the war.

Dr. Compton served during the siege of Vicksburg and was later appointed to the board of examining surgeons. At the close of the war he returned to his home in Marshall County and was elected to the constitutional conventions of 1865 and 1868. In 1870 he was appointed superinten-

dent of the State Insane Asylum, serving in this capacity for two terms, after which he returned to Marshall County, where he began the erection of a private asylum, intending to devote the remainder of his life to this specialty, but before its completion came the epidemic of yellow fever, in the fight with which, although not previously engaged in general practice, he laid down his life.

Before his election to the presidency, Dr. Comp-ton served the Association in 1869-70.

Transactions 1879.

NOTE—If anyone knows of any additions or corrections that should be made to the above sketch, please communicate with Dr. E. F. Howard, Historian, Vicksburg.

HONOR ROLL

The following have co-operated in making this number of our Mississippi part of the JOURNAL:

COUNTY EDITORS—L. Wallin, C. W. Patterson, L. W. Dotson, L. L. Minor, C. C. Buchanan,

W. F. Hand, R. C. Elmore, B. S. McIlwain, A. M. McCarthy, C. T. Burt, W. B. Dickins, G. S. Bryan, W. R. Hand, R. P. Donaldson, R. B. Cunningham, W. C. Pool, E. L. Walker, F. M. Acree, M. L. Montgomery.—19.

COUNTY MEDICAL SOCIETIES — Central, Robin Harris; DeSoto County, L. L. Minor; East Mississippi, T. L. Bennett; Harrison-Stone-Hancock Counties, E. A. Trudeau; Issaquena-Sharkey-Warren Counties.—5.

HOSPITALS.—Mississippi Baptist Hospital, L. W. Long; Vicksburg Sanitarium; Newton Infirmary, Mrs. S. Kemp; Holmes County Community Hospital, R. C. Elmore; Jackson County Hospital, S. B. McIlwain.—5.

OTHERS.—F. J. Underwood, E. F. Howard, D. W. Jones, R. A. Street, Jr., F. M. Smith, Meridian Medical and Surgical Clinic, T. W. Kemmerer.—7.

TOTAL CONTRIBUTORS.—36.

THANK YOU.

BOOK REVIEWS

The Failing Heart of Middle Life: By Albert S. Hyman, A. B., M. D., F. A. C. P., and Aaron E. Parsonnet, M. D., C. M., F. A. C. P., Philadelphia, F. A. Davis Co. 1932. pp. 538.

The first part of the book is devoted to anatomical and physiological factors of the coronary circulation and the etiology and pathology of coronary sclerosis which represents fairly well present day opinion.

In Part II, chapter eight, the authors describe myocarditis due to acute infectious diseases. For the chronic myocardial changes they use the name myocardiosis, which they propose as a designation for coronary and myocardial insufficiency. No real advantage is seen in the use of this term.

Attention is called to the fact that subjective phenomena in early coronary disease outweighs the physical findings. This is not probably always true of the electrocardiographic findings. The statement that the vital capacity test in all of its various modifications presents one of the most valuable objective findings in early myocardial disease would not find sanction by all.

The third part is taken up with coronary thrombosis and occlusion, pain, shock, blood pressure phenomena and other symptoms, prognosis and treatment, covering the subject in a rather complete manner. The statement that the cases of coronary occlusion that show no pain are more likely to occur in the older patients and that they may have marked dyspnea instead, is of some interest. Under prognosis attention is also called to the tendency of the more serious outcome in the apparently mild cases, and is shown by Bramwell to be due to underestimation of the extent of the

underlying pathology, such cases being permitted greater latitude as to physical exertion.

Part IV deals with the electrocardiographic changes associated with coronary disease. He states, "The spread of the excitation wave from the time it leaves the sinus node until it reaches the auriculoventricular node of Tarwara is described in electrocardiogram by the P-R interval," this is not wholly correct. The P. R. interval is the time it takes the "excitation" to pass through the auricular muscle, the node and bundle and the beginning of the excitation of the ventricles, represented either by a Q wave or an R.

The authors use the old nomenclature in describing the electrocardiographic changes associated with bundle branch block and only mention the work of Wilson and his co-workers in the introduction.

The chapters on general considerations of angina pectoris, in Part V, represent fairly well present day current opinions; however, there are a few statements that wouldn't go unchallenged. On page four hundred two they say, "We can summarize the relationship between coronary thrombosis and angina pectoris by saying that the two conditions must be regarded separate and distinct entities, the one a purely pathogenic process, the other a physiologic state."

Part VI deals with general legal aspects of sudden death from heart disease.

The opinion of the reviewer is that while there are many statements in this book that cannot be accepted, it may however, be read with profit.

J. M. BAMBER, M. D.

Medical Entomology: By Robert Matheson, Ph. D. Springfield, Ill., Charles C. Thomas. 1932. pp. 489. Price, \$5.00.

According to the preface "this introductory text is offered to the physician, the entomologist, the public health worker, the student and the layman in order that it may inform and arouse a keener interest in the problems involved in insect-borne diseases."

This admirable text book or reference work contains information on the morphology, life history, identification, control and disease relationship of all arthropods of medical importance. Photographs of Manson, Ross, Reed, Ricketts, Howard and Comstock, a few of the pioneers in the development of this subject, appear on the frontispiece and add considerably to its interest. A brief historical account of developments in medical entomology is given in the first chapter together with certain problems of insect-borne diseases. Chapters 2-18, inclusive, deal with those Acarina and Hexapoda which are intermediate hosts of human infections or are themselves directly parasitic on man. Chapter 17, on myiasis, calls attention to the surgical uses of maggots in the treatment of osteomyelitis. Chapter 19, on the poisonous and urticating arthropods, includes a discussion of insect allergens as exciting causes of coryza and asthma. Chapter 20 gives a concise account of methods of collecting, preserving, mounting and rearing insects. This chapter is intended for the beginner only. This is followed by a separate author and subject index, the latter being especially carefully prepared and cross referenced. Very conveniently, each chapter is concluded with a well-chosen bibliography and references which have complete bibliographies are starred, thus saving space and being helpful to the reader. The work is profusely illustrated with over 200 figures, two-thirds of which are original and a very large percentage are drawings rather than photographs. These excellent figures alone justify the publication of such a volume and the care with which they have been executed speak for the high calibre of the work as a whole. Usable keys to families, genera and in certain instances, the species are included. In the main, these have been wisely restricted to America and frequently to North America. The majority of the characters used in these keys have been illustrated in the text.

Dr. Matheson's teaching experience has well fitted him for the authorship of a text book on this subject and the present volume leaves little to be desired. As a reference work, the physician, entomologist, research worker, etc., will find an excellent digest of the most recent work. The book should especially appeal to the medical profession since great stress has been placed on the disease relationship of these arthropods with a

careful description of the development of the etiological agent in the intermediate host. The reviewer believes that not only the medical practitioner, but those interested in preventive medicine will find concise information on the control of the various arthropods in addition to important epidemiological data. The reader requires no expert training in entomology to find this text useful and with a little time and care might easily acquire facility in recognizing, handling and rearing insects of medical importance.

The author has made a distinct contribution and together with the publisher deserves the highest commendation upon the publication of such a valuable volume. The marked absence of typographic errors is an indication of the careful attention to details with which it has been produced. Those acquainted with the author's "A Handbook of the Mosquitoes of North America" will find that all the groups of arthropods considered, have been dealt with in the same authoritative manner as in the earlier treatise.

E. HAROLD HINMAN, PH. D.

Handbook of the Vaccine Treatment of Chronic Rheumatic Diseases: By H. Warren Crowe, D. M., B. Ch. (Oxon.), M. R. C. S., L. R. C. P. 2nd ed. London, Humphrey Milford, Oxford University Press. 1932. pp. 78. Price, \$0.80.

The only changes of note from the previous edition is with regard to dosage of vaccine. Formerly where 500,000 organisms were given the author now advocates starting with 100,000 and this is usually reduced, often ten-fold, three consecutive times. It is urged that polyvalent vaccine always be used, even if an autogenous one can be prepared, as the author holds that the polyvalent type has decided advantages. Treatment is so simplified as to be almost rule of thumb.

The contention is still made that staphylococci are responsible for rheumatoid arthritis and streptococci for the other rheumatic conditions. Sentence structure is very poor and incomplete case reports are jotted down at random.

J. C. BARTON, M. D.

The Children's Tonsils In or Out: By Albert D. Kaiser, M. D. Philadelphia, J. B. Lippincott Co. 1932. pp. 307.

An excellent book well written and easily read, presenting the present day conception of tonsils and adenoids. The author presents the subject matter very systematically, taking up in detail all questions and problems concerning tonsils and adenoids. The fact that several of the chapters on special phases relating to tonsils and adenoids have been contributed by different men who rank high in their chosen fields, enhances the value of the book. The chapters on Anatomy and Physiology, and complications due to the presence of

tonsils and adenoids, are well worth reading. The summary at the end of each chapter helps to emphasize the necessity of complete removal of all lymphoid tissue. In the majority of cases the author deplores the use of electro-therapy and radiation in children, except—highly selected cases—stating that reports of its use in adults is so unconvincing as to merit but little consideration.

F. E. LEJEUNE, M. D.

Clinical Gynecology: By C. Jeff Miller, M. D.
St. Louis, C. V. Mosby Co. 1932. pp. 560.
Price, \$10.00.

This book is a companion volume to the author's *Introduction to Gynecology*, and, as is stated in the preface, is designed particularly for the student. The author's extensive clinical experience especially qualifies him for the writing of this text, and his intimate contact with medical students and practitioners over a period of many years makes him thoroughly cognizant of their needs.

It is the function of a reviewer to point out the imperfections of a book, and to make suggestions for its improvement. In this instance, however, the reviewer can find nothing to criticize, and hence can only call attention to the merits of the work. The author's style is most pleasing, and there is no ambiguity in his statements and no uncertainty as to his stand on any question. The important points are in blackface type, so that they leap at one, so to speak, from the printed page. The arrangement of the book is excellent; especial attention is called to the fact that the operative technic is concentrated in a special section, and not scattered throughout the text. The illustrations are most excellent, and leave nothing to be desired.

In a few words, this is a concise, up-to-date, and adequate presentation of the subject, written by an outstanding authority, and will be of great value, not only to the medical student, but to physicians in general practice. Specialists in gynecology as well, will find it a most valuable addition to their libraries.

E. L. KING, M. D.

Practical Obstetrics: By P. Brooke Bland. Philadelphia, F. A. Davis Company. 1932. pp. 730.

Every teacher in obstetrics has undoubtedly formed the resolution at one time or another to write a text-book of midwifery which should present the subject according to his own conceptions. Unlike most teachers, Professor Bland has executed his resolutions in this new volume, *Practical Obstetrics for Students and Practitioners*. In his preface he states that its purpose is to fill the gap between the standard textbooks and the small manuals, which are often, unfortunately, the sole vade mecum of the embryo accoucheurs.

Although a large and vacuous gap does exist between these two, there is some question whether Dr. Bland's book fills it or straddles the interval.

For example, the chapters on the anatomy and physiology of the reproductive tract are excellent, detailed, abreast of the recent findings, and superbly illustrated. A long chapter of 32 pages covers the diagnosis of pregnancy very adequately from a number of different angles, with tables of differential diagnosis that will prove a great aid to the student. A description of the Aschheim-Zondek test, the Friedman modification, and the Mazer-Hoffman test will be a boon to the busy practitioner who has not kept himself familiar with the amazing new developments in this field.

On the other hand, a serious criticism might be made of the chapters on the pathology of pregnancy, the toxemias, and the hemorrhages. The completeness and scholarship which characterized the first part of the book are sacrificed to conciseness. For one who has already studied obstetrics the treatment in this new book represents a delightful summary, but for the student, that is the good one, whose commonest thought is "why"?, and for the practitioner who realizes how seldom one meets text-book cases, recourse must be had to the larger works.

There is an aspect of obstetrics that lies near the field of the gynecologist: abortion and ectopic pregnancy, and instead of the usual cursory attention, Dr. Bland deals with it very satisfactorily. The student will find simple and clear the chapter on the mechanism of labor, particularly the diagrams of the relation of the forces and resistances, and the discussion of the shoulders and the breech. Gratitude must be expressed for the introduction of the term "lie" to settle the arguments on the definition of "presentation."

Dr. Bland leans nearer to the side of the manual in his description of the physiology and conduct of labor, which suffers from an effort at condensation. The contents of the obstetrical bag and the arrangement of the chairs in the home delivery might well be left out. A family with as much furniture as Dr. Bland has indicated will usually be able to afford hospitalization. Again, the exact method of delivering the baby varies with the obstetrician. Many men feel that ironing out the perineum without deep anesthesia is a waste of effort and source of infection under any circumstances. The modified Ritgen technic, which is popular, is not mentioned. The use of the Kielland forceps in the occipito-posterior position is not mentioned in the treatment of this complication. Although these are individual opinions, many obstetricians will find contrary to their own teachings the statement, in discussing the delivery of the aftercoming head: "... steady and firm traction in the direction of the birth canal is exerted upon the shoulders."

The element of conciseness is appreciated in the chapters on contracted pelvis; on the other hand, puerperal infection is well presented because of the amplitude of the discussion. Equally good is the chapter on operative obstetrics with the one exception of the subject of induction of labor. The new-born, unfortunately, is not given the mention that he deserves. Although almost every complication and type of therapy is noted, the student and the practitioner are merely stimulated to further reading. Great praise is due for an excellent chapter on Obstetrical Jurisprudence. The volume closes with a large and recent bibliography.

This new book does not eliminate the necessity of our larger text books in teaching obstetrics. On the other hand, although representing the author's personal viewpoint on many subjects that are open to discussion, it is a distinct contribution to obstetrical literature, particularly from a pedagogical point of view.

ARTHUR G. KING, M. D.

The Differential Diagnosis of Endocrine Disorders:

By Allan Winter Rowe, M. D. Baltimore,
The Williams & Wilkins Company. 1932.
pp. 220. Price, \$4.00.

This volume represents a collection of the material presented by the author and his associates in various publications in the past decade. During that time over five thousand individuals have been carefully studied by a large group of clinicians and laboratory workers. The author's thesis is that "no one test is competent to establish a diagnosis and each observation derives its true diagnostic significance from its interpretation in terms of all other available information." The present monograph, therefore, covers studies of patients from many points of view, including not only history and physical examination, but all types of laboratory, physiological and psychological tests. While the data presented are interesting, they seem to point in no special direction. The work, therefore, will serve more as a reference for those interested in this field rather than a particularly informative book for the average clinician. The bibliography is arranged by authors alphabetically, rather than by titles, an arrangement which, in the reviewer's opinion, makes it distinctly less useful.

I. I. LEMANN, M. D.

Infants and Children: Their Feedings and Growth:

By Frederic H. Bartlett, M. D. New York,
Farrar & Rhinehart, Inc. 1932. pp. 424.

This book is one of the most complete of its type. It is in reality a simple text book of pediatrics with most of the stress laid on the management of the well and sick child. It is teeming with practical suggestions.

The first part of the work is devoted to the feeding of infants and children. Any normal child fed according to the directions given should thrive and be free of nutritional disorders and difficulties, which have been the results of fads in infant feeding. This book is quite free from such fads, and gives remarkably complete detailed directions. The advisability of gradual dietary changes is given due attention. Although in the preface and throughout the book it is stated that this work is not intended to supplant the physician's advice, it may do so in the hands of some mothers because of the thoroughness of directions. Any mother who forgets that her infant is an individual with his own problems, and who thinks that the only way of feeding or treating a baby is by the way recommended in this or any other similar publication, should not be given a work of this type to read.

The sections dealing with minor ailments, such as constipation, are excellent. The sections on vomiting are almost complete enough for the physician. The general plan of treating gastrointestinal upsets and simple diarrheas by the initial partial withdrawal of food is emphasized.

Physicians, nurses, and mothers will probably find that the chapters on the care, training and habits of infants and children are the most beneficial. Good psychology and straightforward, useful suggestions are given.

In the present scheme of the great movement of child hygiene and parental education this work will probably find an important place.

HERBERT B. ROTHCHILD, M. D.

Diagnosis and Treatment of Postural Defects:

By Winthrop Morgan Phelps, B. S., M. D.,
M. A., F. A. C. S., and Robert J. H. Kiputh.
Springfield, Ill., Charles C. Thomas. 1932.
pp. 180.

In response to the growing interest in body mechanics and correction of postural deformities, the authors have presented their observations in a most interesting book.

They trace the effect of gravity on the quadruped as he assumed the upright position and they show that postural weakness is due to the effect of gravity on the vertical position. The additional influences of environment and habit are shown to have a direct bearing upon the static normality or deformity of the individual.

The authors enter into an excellent discussion of the correct carriage and the importance of abnormalities other than of the spine, as factors in the production of an abnormal posture. Structural changes of the mild type are clearly considered, and it is in this section that the reader is struck with the excellence of the work. The investigation of functional asymmetry as a cause of improper body mechanics is also considered.

Another valuable portion of this book is the chapter devoted to corrective exercises. It has long been held that in the treatment of improper posture, certain physical exercises be prescribed. This has been left in the hands of physical culturist, dancing teachers and others and because of the unsatisfactory results we have allowed corrective therapy to languish and have fastened our attention on retentive devices in the vain hope of inducing correction of faulty posture by belts, braces, etc.

It is in this final chapter that the corrective exercises are given, illustrated, not by diagram but by photographs, showing the right and wrong positions, and explaining the loss of stretching resulting from the incorrect position.

Such a work as this will prove its value in the field of physical education, pediatrics and orthopedics and these observations on this important subject will be well received by the medical profession as a whole. When we become cognizant of the important role that incorrect posture plays in many functional conditions and the methods of correction of these static deformities we will have gone a long way toward reducing these disabling conditions.

DUDLEY M. STEWART, M. D.

Diabetes in Childhood and Adolescence: By Priscilla White, M. D. Philadelphia, Lea & Febiger. 1932. pp. 237. Price, \$3.75.

In 1922, Priscilla White was a student at Tufts College Medical School. She caught the eye of Dr. Elliot Joslin while she was doing metabolisms for Dr. Labrey. He could not help noticing this early rising young woman who after the tedium of two hours work from 5 A. M. to 7 A. M. still evidenced enough interest and energy to study and entertain his diabetic children before going to her classes. Since her graduation, save for one year, she has virtually lived with Dr. Joslin's younger diabetics. Ten years of constant observations and experiments on a group of patients, who are probably the best controlled in the world, are her qualifications for writing this monograph. In no degree comparable to the masterpiece of her preceptor it is a splendid contribution which with frequent revisions will become increasingly valuable.

With the advent of insulin the horizon of the juvenile diabetic brightened, children who lived a few days or a few months now live to indefinite periods, and because no diabetic child ever lived so long before, they have become explorers of uncharted seas. In the study of the juvenile diabetic therefore the solutions of many unsolved problems may be found. Dr. White's presentation is logical and consists of the analysis of a wealth of facts. Unfortunately the chapter on heredity which was calculated to be her piece de resistance

savors of speculation and fancy and she will probably be accused of figure juggling by the hypercritical. Stating that diabetes can be demonstrated to be transmitted as a simple Mendelian recessive if the efficiency of diagnosis is 82 per cent efficient (an arbitrary figure), she advises against the union of two homozygous diabetics since all the offsprings will eventually develop diabetes. The union of a homozygous diabetic with a heterozygous non-diabetic should result in equal numbers of children developing and not developing diabetes. When both parents are heterozygous non-diabetics one quarter of the offspring should develop the disease. If a homozygous diabetic marries a pure homozygous diabetic then one of the children should develop diabetes. Such conclusions on the basis of her data are open to criticism, on the grounds that she uses a segregating population, arbitrarily chooses 82 per cent correctness of diagnosis and applies the laws of chance to statistics. Also, it is impossible to calculate the number of non-segregating families in which the types of mating is heterozygous non-diabetic *inter se*.

Too meagre is the treatment of behavioristic problems in the diabetic child. This important phase of the subject certainly merits at least a chapter.

Except for the above two objections Dr. White's book is brilliant. Interesting indeed are the photographic illustrations and Figure 22, p. 203, should win a grand prix. It is a picture of a little girl aged two years and eleven months, injecting her own insulin.

MAURICE SULLIVAN, M. D.

PUBLICATIONS RECEIVED

Charles C. Thomas, Springfield: A Textbook of Surgery, by John Homans, M. D. Chapters in American Obstetrics, by Herbert Thoms, M. D. The History of Dermatology, by W. Allen Pusey, A. M., M. D., L. L. D. Pituitary Body, Hypothalamus and Parasympathetic Nervous System, by Harvey Cushing.

The Macmillan Company, New York: A General History of Nursing, by Lucy Ridgely Seymer, M. A., S. R. N.

The Williams & Wilkins Company, Baltimore: Sex and Internal Secretions, by Edgar Allen.

J. B. Lippincott, Philadelphia: Office Surgery, by Fenwick Beekman, M. D.

W. W. Norton & Company, Inc., New York: The Physical Basis of Personality, by Charles R. Stockard.

Emerson Books, Inc., New York: The Sex Technic in Marriage, by Isabel Emslie Hutton, M. D.

The Rockefeller Foundation, New York: Methods and Problems of Medical Education (Twenty-first Series).

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THE EXPERT MEDICAL WITNESS*

S. C. BARROW, M. D.

SHREVEPORT, LA.

During the last twenty-six years, the writer has lived and practiced the specialty of roentgenology in the domicile of the second largest civil and criminal court in the State of Louisiana. I have thus, by the nature of my work and location, had an opportunity and experience which have enabled me to observe and study the expert medical witness in many of his shapes, phases and actions.

This experience and opportunity to observe, has brought forcibly to my attention, certain conditions, customs and practices which all, unbiased and unprejudiced, recognize as inimical to justice and right. It is from this experience that I wish to speak, and not from any academic knowledge or statistical study of the writings of those who have practiced it as an economic art.

The expert medical witness is of interest to this body of Railway Surgeons only insofar as he appears in the prosecution and defense of civil suits by those who may have sustained bodily injury. We thus further limit our discussion, omitting any reference to the expert medical witness in the determination of results of criminal action, mental and neurological states.

Referring to the subject of our remarks, the expert medical witness: Who is he—How does he differ from other witnesses, or how should he differ—Under what conditions should he be used—What value should

be attached to his testimony—What are the evils attendant upon his use and how can they be best eliminated?

A correct answer to these questions, if it can be found, will eliminate at once, many of the evils so common and constant.

In answer to the first, "Who is he", I draw a distinction between the expert medical witness and the medical expert witness: the former is rare, the latter quite common. The term expert witness carries to the mind of the ethical at once, a stigma, while the term expert medical witness conveys the thought of a medical witness specially trained in the school of experience and by study on the subject under investigation. This is no new thought or statement of fact, but one frequently overlooked by the court, the attorneys at bar and of course, by the jury.

Any physician, qualified to practice medicine in this country, in this age, is naturally more expert in medical matters than the best informed layman; but in the ranks of the profession, there are varying degrees of expert knowledge. We have the expert, the more expert and the most expert, and while one may have a greater knowledge and understanding in one instance, he will not be so expert, or totally inexperienced in another. Therefore, the expert medical witness is a different individual as the case may be, and no one man today, can be accredited with superior knowledge in every medico-legal problem.

These facts are beyond dispute, yet we constantly observe in certain sections, certain medical men constantly qualifying as experts, regardless of the question at issue, with the court and attorneys at bar accepting the sit-

*Read before the Cotton Belt Railway Surgeons Association, Texarkana, Texas, December 12, 1932.

uation with complacency. I have personally observed physicians on the witness stand, at one sitting and in connection with a single case, answer questions as an expert, which involved special knowledge of pathology, roentgenology, neurology, psychiatry, surgery and various other of the specialties in medicine. We frequently find physicians who attain proficiency in more than one of the medical specialties, but rarely if ever in several or in them all. This fact is known not only to members of the medical profession, but to the bar and court, even when permitting their testimony to go into the record and to the jury.

Without claiming any knowledge of jurisprudence, it would seem in the interest of justice, the court should decide and rule as to whether a doctor has properly qualified as an expert before permitting him to testify. Under our present laws, if this power is not vested in the court, they should be amended accordingly.

We have in all the states of the union, boards, the result of legislative acts, which pass upon the qualifications of physicians to practice general medicine. In order that a physician may practice one of the recognized specialties in medicine, it is just as urgent, in the interest of the community, that he have proper training in this specialty as it is that a man have proper training to practice general medicine. Therefore, it would seem that legislative acts providing for special boards to pass upon the qualifications of physicians desiring to practice a recognized specialty in medicine, would be in the interest of the community and would indentify and classify the profession into groups according to their proficiency. With such a classification on record and available, a surgeon would be rather loathe to go into court and attempt to qualify as a roentgenologist, a neurologist as a pathologist, or a urologist as an ophthalmologist, and vice versa.

At the last meeting of the House of Delegates of the Louisiana State Medical Society, I recommended such an advanced step, but to no avail. This principle however, is en-

dorsed by the American Medical Association.

Again, attorneys should be more zealous in the interest of their clients than to permit testimony to go into the record, or to a jury, as expert evidence in which its expertness has not been properly determined. In all cases necessitating expert medical testimony, the question is usually decided on this testimony which places an added responsibility and moral obligation on the court and the physician testifying. That evils exist, both the legal and medical professions know, but not more so than does the public.

We have medical testimony and expert medical testimony. There is a great difference, and the difference constitutes the definition of a medico-legal expert: the doctor who has given sufficient special study and has had reasonable experience in the special question under dispute. In constrast to this, we have too often the professional witness, and too often, he is tolerated by the court and sought after by the members of the bar.

In analyzing the situation and searching for a remedy which will correct the evils, we see at once that it will call for the combined co-operative efforts of both the professions, as each is at fault as well as the public.

It may be argued that lawyers, whether on the bench or at the bar, are no judges of what would be a properly qualified expert medical witness. This is no doubt true, but only because no effort has been made in the past to study such matters. Not only should a medical witness show proper scientific knowledge relative to the questions at issue, but his reputation for veracity must be unsullied.

The medical profession admits her share of the fault in this perplexing problem.

To argue that the evils may be corrected by purging our rosters of the professional medical witness and the unscrupulous lawyers, is to admit our impotency, our impracticability and childish belief in the Utopian.

Our professions, legal and medical, are composed of mere humans taken from the general masses, and not selected because of integrity, or a high moral sense of responsibility. We know there are vultures in our

ranks, but they are hard to get at, or get rid of.

I have in mind a man who fills an important public position, who in his effort to have himself appointed as Chief Surgeon of a Railroad Company, told certain influential members of the board that he knew how to swear when the occasion demanded it. To the honor of the railroad company be it said, his name was at once dropped from the list of those being considered.

Again, a man, I am sorry to say, doing roentgenology, says to a friend of mine, "When the doctor sends a patient to me, I always find something the matter." Think of it—these two represent a type that the "shyster" lawyer contacts first always, when getting his medical evidence in line. The "shyster" lawyer and crooked doctor, with an indifferent court, constitute nothing less than a racket, however innocent of evil intentions the judicial element of the racket may be.

In the United States, according to the I. C. Com. Bureau of Statistics for 1931, there were 40,755 people killed and injured by Steam Railways. Everyone of these constituted a potential damage suit against the Railroad Company and in the largest bulk of cases, a final settlement, whether in or out of court, rested upon the expert medical testimony.

When we pause and consider the vastness of the army of killed and injured, aside from these by steam railways, the immensity of the problem overwhelms us. The vast sums extracted from corporations and individuals, through the chicanery of the unscrupulous lawyer, manipulating the pliable medical witness under the very eye of our courts, run into the many millions and causes the fortunes of the Capones and his kind to pale into insignificance by comparison.

What can be done that justice may be meted out rather than injustice, insofar as the weight of the expert medical witness is concerned?

That we will have the unscrupulous lawyer and doctor to bedevil us forever, there is little doubt. They cannot be legislated out of

the picture, but there are ways, just and powerful which will squelch them to the minimum.

The Supreme Court has long since held that each state has the right to pass Acts setting up standards for the practice of medicine, that the individual's health may be protected and as a result, all states have such laws. If the state has the right to set up certain standards of medical practice over the country, to protect its citizens health, then it has the right to set up certain standards of medical procedure in its own courts, to protect its citizens in their property rights.

The constitution provides a man shall not be deprived of his property except by due process of law. Any system which permits the establishment of false testimony in a record, through indifference on the part of the court, is not a due process.

In Louisiana, we have a statute which delegates to the court, the privilege of inquiring into a man's sanity through the testimony of physicians appointed by the court, for the purpose of the examination, when it appears that the sanity of the case will be an issue in the trial.

In this way, unbiased truthful findings are most likely submitted to the court and jury and in addition, this procedure has the tendency to discourage the appearance of the professional crooked medical witness. I am informed by those who have had experience in the operation of this law that it is rapidly removing from the arena, the horde of professional witnesses, and having at the same time, a salutary effect on the attorney who might be willing to rest his case on quantity rather than quality evidence.

In one of the District Courts of Louisiana, the Judge of that Court tells me that he regularly appoints a physician of his choosing to examine all cases when it seems there is going to be a marked difference in the medical testimony.

By this procedure, he secures information that at least is not biased and is as nearly correct as it is possible to get. At the same time, knowing that this plan may be followed at any time, a deterring influence is exerted on

the lawyer who would use a crooked witness, and on the witness who would permit himself to be used. To my mind, this procedure offers more possibilities in clearing up many of the evils attendant upon the use of the medical witness than any other plan that might be advanced.

It must be remembered that we are all human, with the frailties of human nature. When called to examine and testify as to the findings in a given case in litigation, those most honest and sincere have to admit the tendency to magnify their findings, or the reverse as it suits. To deny this and swear there is no mite of unfairness or prejudice in our testimony when employed by an attorney for one side and not by the court, is to claim for oneself super-human attributes, for the human in man will not down and cannot be made to down.

In my remarks, I have already admitted my lack of knowledge regarding jurisprudence. It does not appeal to one who is simply trying to devise a way or means of offsetting certain evils in our courts, so obvious to all, in the use of expert medical testimony, that there is much law to be argued or used. If it is shown that the majesty of the law is not in accord with procedures which may tend to overcome the evils existing, then let's have a change in that law, a change which will permit, in fact compel, the court to see that the truth in a given case is presented, if necessary, through the testimony of an unbiased expert medical witness of the court's choosing.

Let's have a change in the law, which will make the court, the judge, and compel him to judge as to whether an expert medical witness has properly qualified.

Let's have a change in the law, which will permit and direct the court to analyze the testimony of expert medical witnesses and signify to the jury, which should be taken "cum grano salis".

To all of which the staid solon, accustomed to move and act only in an atmosphere of technicalities and restrained formalities, answers: "It cannot be done—it is illegal".

To this we make reply: Legalities and il-

legalities are man-made rules of restraint only, and only when resting upon basic moral foundations, should they remain undisturbed. Regardless of what principle upon which they were supposed to be founded, if injustice results, a change is demanded.

THE TREATMENT OF TOXIC GOITER BY MEANS OF RADIATION THERAPY*

LEON J. MENVILLE, M.D.†

NEW ORLEANS

Every physician should be interested in any method of treatment, whether it be medical, surgical, or radiologic, which produces excellent results with practically no mortality. Usually such a form of treatment meets with opposition from a certain number of the medical profession who, because they, not understanding its effect and mode of application, become doubtful of its reported good results. In radiation therapy we have such a method. It has been used for many years in the treatment of toxic goiter. During its early employment in the treatment of this disease, indifferent results were obtained, due to inadequate apparatus, lack of experience in its use, and inability to standardize its mode of application. In spite of these difficulties, radiation therapy was continued, principally because it was considered a safe form of treatment, and, besides, a fair percentage of cures was being obtained.

The present-day treatment of toxic goiter with radiation is considered very important, virtually indispensable, in the handling of this disease. In fact, statistics show that the percentage of cures obtained by this method compares favorably with that from any other form of treatment, and it enjoys the advantage of being almost free of mortality. This is to be regarded as important, since it is reported that some other forms of

*Read before the Orleans Parish Medical Society, June 13, 1932.

†From the Departments of Medicine and Radiology, Tulane University School of Medicine.

treatment have a mortality rate of between 8 and 10 per cent.

In the hands of the experienced radiologist, radiation therapy has a high percentage of cures when applied to toxic goiter, with but few failures. Pfahler¹ recently reported 361 cases of thyrotoxicosis treated with radiation therapy with cure or marked improvement in 87.8 per cent. Williams² several months ago reported a series of 200 cases of toxic goiter treated by radiation therapy. The percentage of cures in his series was 80.5 and 13.5 per cent improved, or 94 per cent either cured or improved. These statistics, while very flattering, are not to be considered as representing the results obtained by radiologists of varying experience. For this reason, I recently gathered interesting statistics in a series of over 10,000 cases of toxic goiter treated by radiation therapy by radiologists in different sections of the United States and Canada.³ Some of them had limited experience in the treatment of this disease, as was evidenced by their reporting as few as 5 cases, while others of larger experience reported having treated as many as 1,000 cases. The percentage of cures in this series of 10,541 cases was 66.22; the percentage of improvement, 21.07; percentage of failures, 12.4; and the percentage of cases treated after operation, 9.95.

These favorable statistics will no doubt be a surprise to some physicians, but not to those who are conversant with the current medical literature, which frequently publishes reports on the results of this form of treatment.

There are several reasons why such uniformly good results are being obtained with this form of treatment. One is that, in treating the thyroid gland, the thymus gland is also irradiated. It has been known for some time that certain changes occur in the thymus gland of patients suffering with thyrotoxicosis. Experiments have shown that after thymectomy in animals the thyroid gland tends to become hyperplastic, as in Graves' disease, and likewise, following thyroidectomy, the thymus becomes hyperplastic. Many outstanding investigators have been

emphatic in their belief that there exists a relation between hyperplasia of the thymus and thyrotoxicosis. Notable among them are Crotti, Virchow, Gluck, Wiens, Wever, Kaufman, Rossle, Hart, Halsted, and others.⁴

Another reason why radiation therapy has been uniformly successful in the treatment of thyrotoxicosis is the accuracy with which it can be administered. Ingenious scientific instruments have been devised, the result of years of investigation and experimentation, which accurately measure the quantity and quality of the dose prescribed by the radiologist for his patient. A unit of measurement has been accepted internationally, known as the r unit, which is understood alike in all countries. In this manner, the language of the radiologists throughout the world is the same. A competent radiologist can duplicate with little difficulty any technic in radiation therapy administered anywhere. The bureaus of standards of most countries are prepared to calibrate such instruments in the r unit, so that when it is said a patient has been given 500 r units, it is known definitely the quantity of radiation received by the patient. In other words, this form of therapy is standardized and accounts for the uniform results obtained by radiologists in the treatment of toxic goiter.

Radiation therapy in the treatment of toxic goiter has been the means of preventing a most distressing post-operative complication, namely, psychosis. This not infrequent complication is one to which a large number of patients suffering with exophthalmic goiter are susceptible. Its importance is emphasized by a prominent American surgeon who says, "The incidence of post-operative psychosis is rather higher in thyroid surgery than in operative work in other regions of the body, due to the peculiar mental state of the toxic patient. Some physicians hold that individuals who develop exophthalmic goiter are mentally predisposed to the condition."

Very often the statement is made that an irradiated thyroid gland becomes difficult to remove by operation because of adhesions, believed to be due to radiation therapy. Be-

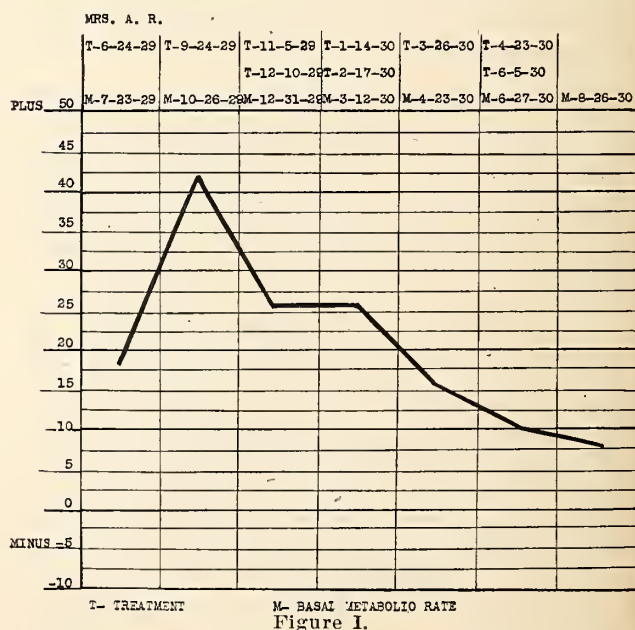
cause of the lack of experimental evidence substantiating this belief, we are sometimes inclined to think that this is, in many instances, simply propaganda against the use of radiation therapy. Soiland, Costolow, and Meland⁵ say that reports from prominent surgeons and pathologists have discredited the belief that irradiated thyroids are more difficult to operate upon. They say: "The general agreement is that it is impossible for the surgeon or pathologist to pick out cases which have had previous irradiation. Difficult operation is often met in cases in which there has been previous thyroiditis with fibrosis, so some of the operative difficulties ascribed to radiation therapy probably have no relation to previous irradiation. However, if the cases are properly selected for irradiation, it is very seldom that surgery will ever be needed."

Walters, Anson, and Ivy⁶ report that the histology of the normal thyroid of the dog was not materially changed by a roentgen ray dosage known to be of clinical value in some cases of hyperthyroidism. The tendency of the effect was in the direction of hyperplasia. Krause and Ziegler⁷ failed to find any specific changes in the thyroids of animals to which they had applied the roentgen ray. Rave⁸ applied large doses of roentgen ray to the thyroid of rabbits and failed to find any histologic changes. Pfeiffer⁹ and also Fiorentini and Louraschi¹⁰ did not obtain any changes in the thyroid glands of dogs subjected to radiation therapy. Bower and Clark,¹¹ after implanting steel radium needles in the thyroid glands of dogs, concluded that the normal thyroid of the dog is highly resistant to the action of radium.

Certain criticisms have been made against reporting goiter cases as improved. It is the belief of some that these cases, because they are not cures, must be classified as failures. Such criticisms are unfair, because in radiation therapy patients may receive a few treatments which improve their condition to such an extent that they believe themselves cured and desert before the treatment is completed. Others are advised by the referring physician to discontinue treatment, as they

are considered by him to be cured. In such instances, they were markedly improved but not cured. Then again, patients after receiving one or two treatments, finding that they have not been cured, may fail to return and resort to some other form of treatment. A large number of these cases would have resulted in cures, and others, perhaps, in failures, had they persisted with their treatments. We can agree with the critics that a given patient with toxic goiter who abides by all the directions of the radiologist and receives the required number of treatments which should ordinarily constitute a cure, and is still only benefited, should be classed as a failure.

Our personal experience in the treatment, by means of radiation therapy, of a large number of patients suffering with toxic goiter has been highly gratifying, and our results compare favorably with those of radiologists of other sections. We are presenting at this time only three of our cases, which will serve as a small representative group, showing the irregularity with which patients present themselves for treatment, and also demonstrating the good results to be obtained in spite of the long intervals of time elapsing between treatments.



Mrs. A. R. was referred for roentgen ray treatment for toxic goiter on June 24, 1929, when she was given her first treatment. Four weeks later (July 23, 1929), her basal metabolic rate was plus

17. She failed to report in four weeks for her second treatment, but came on September 24, 1929, when she was given her second treatment. One month after this treatment, she had a basal metabolic rate of plus 42, a rise of 25 points. On November 5, 1929, she was treated for the third time, and her basal metabolic rate, taken four weeks later, had come down to plus 26. She then came more regularly for treatments, which were given on December 10, 1929; January 14, 1930; February 17, 1930; March 26, 1930; April 23, 1930, and her last treatment was given on June 5, 1930. Her basal metabolic rate gradually came down and was last taken on August 26, 1930, when it was plus 8. She has remained well up to the present time.

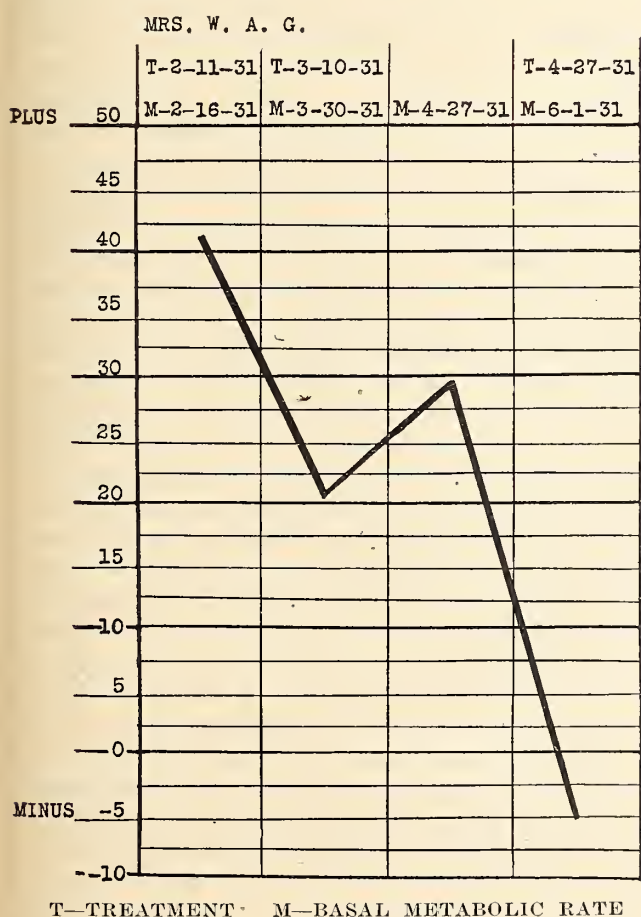


Figure II.

Mrs. W. G. was referred for treatment for a toxic goiter. Her basal metabolic rate, taken in February, 1931, was plus 43. The next day she received her first treatment. Her second treatment was given three weeks later, and on March 30, 1931, her basal metabolic rate had dropped to plus 21. On April 27, 1931, another basal metabolic rate reading was made, which showed a slight rise (plus 29). Another treatment was given her on this day, which was her final one, as her last basal metabolic rate, taken June 1, 1931, was minus 5. She received three treatments in all.

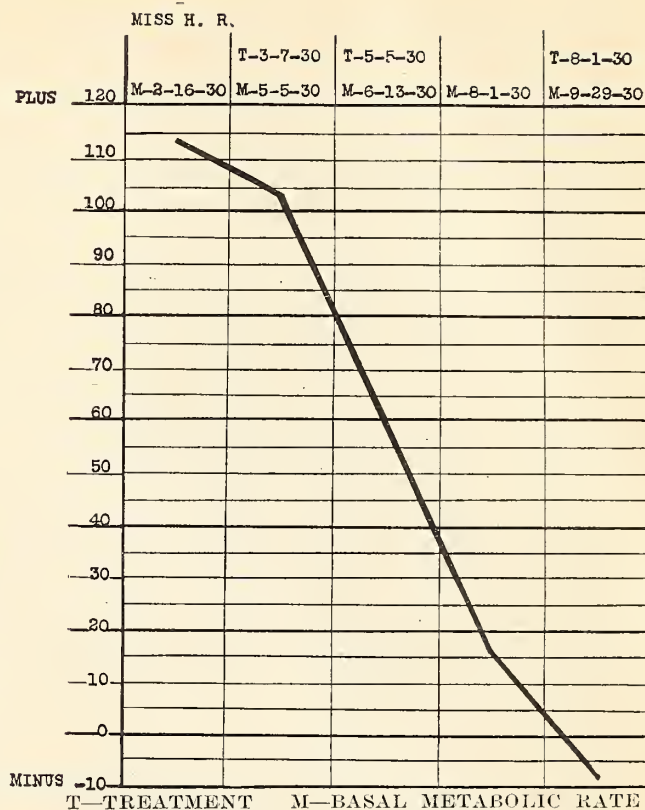


Figure III.

Miss H. R. came to us for a treatment for toxic goiter on March 7, 1930. A basal metabolic reading, made in December, 1929, was plus 114. Her basal metabolic rate, made shortly before her first treatment, was plus 104. Another treatment was given on May 5, 1930, and her basal metabolic reading, made four weeks later, was plus 60, a drop of 54. Her third treatment was administered on August 1, 1930, and her last treatment was given on November 17, 1930. Her basal metabolic reading, made on February 4, 1931, three months after her last treatment, was plus 15. Another, made on August 26, 1931, was minus 7.

From the statistical study presented, also by the results we have personally obtained when treating cases of toxic goiter, it can be concluded that radiation therapy is a highly successful method of treating thyrotoxicosis. Its percentage of cures compares favorably with other forms of treatment, and its mortality rate is practically nil. Myxedema is the only one of the many immediate and post-operative causes of death which can be produced by excessive application of radiation therapy, and this happens so infrequently that it can be considered almost a rarity. For this reason, it is the safest of any single method now in use.

Its economic consideration is of impor-

tance. Patients are relieved of hospitalization, with its attendant expense, along with the mental anguish of an approaching operation. Then, again, should operation be deemed imperative after irradiation, there can be no contra-indication to such a procedure.

It must be appreciated that failures will occur, no matter what form of treatment is employed in cases of toxic goiter. However, more such cases are being cured today than ever before, due to a better understanding of the most suitable form of treatment in certain types of this disease. It is not my intention to expatiate upon the superiority of radiation therapy over the other methods of treatment, but I do wish to call your attention to the effectiveness of this method in properly selected cases.

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DISCUSSION

Dr. Fortier: I wish to endorse most heartily what Dr. Menville stated in his paper. There is no question about it that radiation therapy is very valuable in the treatment of hyperthyroidism. The advantage of the radiation treatment over many others is that you can treat your cases with moderate doses and then go back in three weeks or a month and re-treat, and even do this same thing several times more, if necessary. In surgery, it is very difficult to tell exactly how much of the thyroid gland to remove. I have had the experience of treating cases with partial thyroidectomy which the surgeons referred to me because, although they had been operated on previously, the patients still had

symptoms. In these particular cases the results have been very gratifying indeed.

I do wish to say that radiation therapy should be used in conjunction with the internist and the surgeon, if surgery has been indicated.

Another point I want to bring out is that we should not forget foci of infection when treating thyroids. I have had patients with infected teeth and tonsils who did not improve in spite of radiation therapy, but when the foci of infection were removed the patients got well.

The results as a whole in the treatment of goiters have been most satisfactory.

Dr. Mahorner: It is very difficult to find in the literature any statistics on the comparative results of surgery, medicine, and radiation therapy in the treatment of toxic goiter. Most of the contention has been about exophthalmic goiters, because radiologists do not make any claims that they can cure large adenomatous goiters or decrease the size when there are pronounced pressure symptoms.

Medical men will probably not claim the mortality of 8 to 10 per cent mentioned by the essayist. The surgeons will not claim this mortality rate either, because the mortality for surgery in exophthalmic goiter is less than 1 per cent. Sometimes it has been above that in some places, but those instances do not generally come to light and the reasons why such a mortality occurs probably are not very good reasons; in other words, they should not be allowed to prevail. The mortality for operation in exophthalmic goiter can be less than 1 per cent and from one clinic the mortality recently in a large series of cases was 0.4 per cent. The results from surgery are certainly in the percentage of improved cases 90 per cent, not excelled by other modes of therapy. The percentage of recurrences is not any greater after surgery than from any other method of management.

Gerber has laid down rules for the selection of cases for radiation therapy. He says radiologists should not select cases with very large goiters or very toxic goiters or those cases showing cardiac changes. In surgery all kinds are accepted, and there is no discrimination made against the more difficult type of case.

The question of radiation therapy in the treatment of goiter is not new. It has come up before and has been tried in various places. Clute, of the Lahey Clinic, says they have tried it and found it disappointing. Radiation therapy for toxic goiter has never met with wide acclaim.

Dr. Frank L. Loria: I feel very grateful to Dr. Menville for this opportunity of hearing his enlightening discourse on "Radiation Therapy of Toxic Goiter". It is known that the application of small doses of radium will permanently inactivate the salivary glands. Apparently there is no actual destruction of the individual cells making up the

salivary gland and the cessation of the secretion, it appears, can be explained only on the basis of inactivation. Some authors feel that this is the same manner of action on the thyroid gland and that the improvement following the use of roentgen ray or radium in toxic thyroids can be explained on the same basis.

Radiation therapy of the toxic thyroid was introduced by Williams in 1902. Recently, Robert Abbe of New York introduced radium for the same purpose. The use of both methods appear to have fallen into disuse, especially in this country, very likely because of the abundance of surgical literature, some of which attacked the radiation treatment of the toxic goiter. Rather recently, however, a number of writers, especially among the European authors, have reported some excellent results by the use of roentgen ray and more particularly radium. The earlier users of this form of therapy frequently saw severe burns of the neck often followed by sloughing, hoarseness, chronic laryngitis, etc., which caused the method to fall into disrepute. More recent studies have tended to show that these disagreeable effects resulted from the improper use of the treatment and to poor technic. Very recent reports by Solomon and by Maisin and his co-workers have tended to show that success might follow a more careful technic, and that the disagreeable results alluded to above might be entirely obviated.

Maisin and his co-workers have published a very excellent, enlightening, and valuable report on the use of roentgen ray and radium, especially on toxic thyroids, giving an outline of 121 cases. This report appeared in the August-September, 1931, number of the "*Revue Belge des Sciences Medicales*". Among their cases they give five deaths which, on analysis, they claim were from other causes than the treatment applied. In their report a number of other authors giving more or less similar results are quoted. These authors conclude that the results of properly applied radiation therapy are comparable to properly applied surgery—the selection of one or the other treatment being left to the discretion of the patient.

Solomon, a Parisian radiologist of high standing, reports 100 cases of toxic goiter treated by radiation therapy with 70 per cent cures, 27 per cent improvements, and 3 per cent failing to respond to this form of therapy.

Being interested in thyroid disease from the surgical viewpoint, along which lines I have had greatest experience, the reports of these men made me wonder concerning the interpretation of their results. In looking through Hertzler's book, dated 1929, on "*Diseases of the Thyroid Gland*", this author is found to condemn this form of therapy in well chosen words. Among other things he says, "In my judgment the favorable results occurring

co-incidentally with the use of roentgen rays is due to the associated rest and the element of hope engendered by the urbane and persuasive manner of the roentgenologist, and in spite of his treatment". Other authors, principally surgeons, are equally emphatic in condemning this form of therapy. In December 1931, Prufer, writing from Schlayer's Clinic in Berlin, reported six deaths from toxic goiter following the use of radium or the roentgen ray, the writer giving a very convincing presentation. However, Halberstader, in discussing Prufer's paper, ventured the opinion that the latter's cases were poorly selected.

After hearing Dr. Menville's excellent paper and having reviewed some of the latest literature on the subject I am convinced that this form of therapy has much to recommend it. In one respect, if in no other, the application of this treatment is analogous to that of surgery. Either surgery or radiotherapy can be wrong or right. In the application of surgical treatment the surgeon is undoubtedly the great deciding factor. Similarly the use of radiotherapy carries with it serious dangers. The surgeon may sever one or both recurrent laryngeal nerves, remove too much gland, etc., while, on the other hand, the radiologist, judging from the reports on the subject, must be thoroughly competent to avoid hoarseness, dermatitis, chronic laryngitis, cartilagenous necrosis, etc.

Dr. M. T. Van Studdiford: During my service as Radiologist at Charity Hospital, I had an opportunity to treat quite a number of toxic thyroid patients referred for radium or roentgen ray radiation.

I do not believe any single method is ideal for all types or cases, whether it be surgery or radiation. Our patients were well studied before treatment was instituted. Some had had a sub-total thyroidectomy done in our local hospitals; others were from the leading American Clinics. They were either worse, improved or little changed. Two of our patients with rather high rates died from cardiac failure without responding to radiation at all.

Several others have responded so well that they have again taken up a very strenuous livelihood, such as newsboys and power-house attendants. Several women have married and had two or three children without return of their symptoms. A few of those relieved and with normal rates have had to return after a six months' period for another series of treatments.

I believe that several rates should be run before an actual rating can be determined.

The greatest drawback to the best interests of the patient is that surgeon, clinician and radiologist do not work together. The surgeon rarely tries radiology as a preliminary treatment, but rushes ahead to operate, and the clinician tries his skill

before referring his patient to either the surgeon or radiologist.

Dr. Fortier has suggested removal of foci of infection. This often will cause a rate to return to normal.

Dr. Menville (closing): I am grateful to Dr. Fortier for his kind remarks. I agree with him that focal infection plays a part in certain types of thyrotoxicosis, but it also plays an important role in the production of thyroiditis. It has been proven experimentally that infected teeth and tonsils, etc., often produce acute and subacute non-suppurative thyroiditis. This condition is sometimes confused with thyrotoxicosis.

Dr. Mahorner stated that the mortality rate of operation was less than 1 per cent. This is true in institutions such as Crile's clinic and the Mayo Clinic, the biggest exponents of goiter surgery in the world. Their mortality is very low, and if their low mortality rate prevailed throughout the country, there would hardly be need of any other form of treatment. MacLean sent out a questionnaire to 100 of the most representative hospitals in the United States and Canada, requesting information of their mortality rates in goiter operations. The replies to his questionnaire showed a mortality of 8 per cent. Two years after, he sent out another questionnaire, this time to 200 additional representative hospitals. The replies were practically as in the former questionnaire, 7 per cent. This mortality rate is considered also to be that of the general surgeon in goiter operations.

In reply to Dr. Loria's paper in which he mentioned that there had been some deleterious results following radiation therapy in toxic goiter, such as burns, etc., my paper dealt with the modern application of radiation therapy and not the antiquated methods used years ago. I distinctly emphasized that the uniformly good results obtained at the present time were due to the treatments being standardized, and for this reason we seldom or never have burns. During 28 years of experience with radiation therapy, I have never seen a burn following this form of treatment.

Dr. Van Studdiford says he witnessed several deaths at Charity Hospital at or following radiation treatment for toxic goiter, but he made no mention of the cause of death. A toxic patient with a bad heart could just as well die while washing his feet as on the roentgen ray table. I am wondering if they were not hopeless cases when treated.

Dr. Van Studdiford: These cases were perfectly worked up by the Medical Department and for some unknown reason they went right down. It was not a large percentage. If I had thyroid trouble or was toxic, I would have it roentgen rayed, but these patients died, some under radiation treatment. These patients were worked up with the

Medical Department and followed by them, and yet they died.

Dr. Menville: As to Dr. Ochsner's question, "What does the radiologist consider a cure?" our criteria for a cure are exactly the same as those of the surgeon. I might mention that we have often treated patients who were considered cured by the surgeon, yet they were not cured. It would seem, therefore, that even the surgeon finds it difficult to determine what a cure is. We believe that a patient who shows the symptomatology of toxic goiter, with a basal metabolic rate of, say, 114, and in whom, after a sufficient number of treatments at intervals, the basal metabolic rate drops down to minus 8 and remains low, and the patient increases in weight and strength, the blood pressure is improved, the gastrointestinal disturbances are relieved, the nervous manifestations have subsided, the exophthalmic symptoms are benefited, and Plummer's test shows they have perfect function of the quadriceps tendon muscle, and in whom the tachycardia, tremor, and insomnia are relieved—such a case is considered cured, if the patient remains symptom-free for a long period of time.

In this discussion, no mention has been made of the important part which the internist plays in the treatment of toxic goiter. The interest of the patient is best served when his case is examined from all angles.

The Radiological Society have on numerous occasions manifested this spirit of co-operation. Only last December, in St. Louis, they held a symposium on thyrotoxicosis, in which three eminent surgeons, two equally eminent internists, and two radiologists participated. The different treatments of thyrotoxicosis were discussed and each specialty understood the others thoroughly. It is not a question of whether the treatment of thyroid disease by roentgen rays is superior to surgery, or *vice versa*. Of uppermost importance to the medical profession is what kind of treatment is best for the particular type of goiter.

THE CANCER PROBLEM*

J. M. MARTIN, M. D.
DALLAS, TEXAS

It will be impossible to cover any considerable part of the cancer problem in the time in which I will be allowed to speak tonight. You are probably expecting me to deal with intricate methods of diagnosis and the technic of treatment of the various types of malignancies. I have given some serious thought

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to this subject and I have decided that I can be of greater service to you and to those you serve if I ignore the beaten paths and try to bring to you a realization of the importance of the cancer situation in this country. I will also try to fix the responsibility of the enormous annual death rate from cancer where it rightfully belongs.

I am facing an intelligent audience of both physicians and laymen who are sufficiently interested in the cancer problem to be here tonight. I am going to talk to you face to face in terms that we can all understand about a disease that is rapidly taking first place as a cause of human death in all of the civilized countries on the globe. That disease is cancer. Do you know that in 1900 the death rate from cancer per 100,000 population in this country occupied sixth place, tuberculosis holding first place? Do you know that in 1929 the death rate in this country between cancer and tuberculosis exchanged places? Today, death from cancer in the United States is occupying second place and that of tuberculosis holds sixth place. Do you know that according to vital statistics the death rate from cancer is increasing two per cent per year? Do you know that it has been estimated that during the past thirty years the death rate from cancer in this country has increased sixty per cent? Do you know that the death rate from cancer in this country is equal to ten per cent of the deaths from all other diseases combined? Do you know that more than 125,000 people died in the United States from cancer during 1931—Whether these figures are absolutely correct we do not know, but we are sure that they are not far from the truth and they are more likely to be too small than too large. It is a sad commentary on the medical profession when we are made to realize that all of this has happened in spite of the fact that medical knowledge has advanced farther during the past thirty years than during any similar period in the history of the world.

Cancer is not a new disease. It is as old as history and much older. It has attracted the interest of the best medical talent of

every age and has been treated with every drug and chemical in the pharmacopea. It was the undisputed field of surgery for ages and in late years has been vigorously attacked by the newer methods of radiation. Thousands of cases of cancer have been benefitted and many have been cured but hundreds of thousands of cases are now among us and the future prospects for controlling its ravages are not encouraging.

WHAT IS THE NATURE OF CANCER?

Cancer comes from the Latin word "cancer" meaning a "crab." Not so long ago every newspaper and almanac advertisement of cancer remedies showed a picture of a crab with many legs. Cancer was described in these advertisements as a "tumor with many long roots." The public and some doctors took these statements literally. As a result of this method of educating the people, we still hear our patients talking about the roots of cancer.

There are several kinds of cancer differing somewhat in their structures and behavior. Some are external and some are internal. Some grow very slowly. Some spread by metastasis to distant tissues while others spread through the tissues by extension from the original growth. Some are rapidly destructive and cause death early while other kinds are less dangerous.

WHAT IS CANCER?

You are frequently asked this question and you are sometimes plagued at not having a ready answer that can be understood by every one alike. Your patients want to know just what you think about the subject of cancer and you must satisfy them by having at your command a logical answer. If you fail they often go to some one who is less able to advise them than you are and they may be led to patronize an irregular doctor whose lack of proper diagnosis and treatment may be the cause of an early death. What is cancer? Having been required to answer this question so often and by so many different classes of people, I found it necessary to formulate a plain, practical definition for cancer that will satisfy every one, no

matter how exacting he may happen to be. Cancer is a growth of abnormal tissue, growing without body control and at the expense of the surrounding tissues, with a destructive tendency that will, if not removed or destroyed, always cause the death of the individual.

DIAGNOSIS OF CANCER

Precancerous and early cancerous lesions are often very difficult and sometimes impossible to diagnose correctly without a biopsy, which is often impossible in out-of-the-way localities. Your patients will frequently consult you regarding small lesions, particularly superficial lesions. Unless you have given the subject considerable thought, you will many times, be at a loss to know what to tell them. Too often, you will put them off by saying that the little mole, wart or ulcer is of "no consequence; just let it alone until it begins to cause trouble." This is worse than no advice and the chances are that the patient will go to some one who will cauterize the lesion superficially or he will provide the patient with a plaster which may and often does, aggravate the growth and cause it to spread rapidly. The following rule may be applied to all small lesions in the early stage, particularly if they are superficial. Any lesion, however small and growing in the tissues of an individual in the cancer age, that refuses to respond to simple treatment, is a potential cancer and should be treated as such. When a patient is sufficiently interested in a condition anywhere in his body and has confidence enough in you to consult you, it is your duty to determine exactly what that condition is. If you do not know and you do not feel qualified to treat him, it is a duty you owe to the patient and to yourself to refer him to some one who is qualified to give him the proper advice and treatment.

Every case of cancer regardless of its age or development is an emergency and demands careful consideration and prompt and efficient treatment. Anything short of this, is criminal negligence. The life of the patient often depends on a proper diagnosis and treatment in the early stage and the physician

who fails to see that his patient is properly cared for may be responsible for his death.

The specific cause of cancer is unknown. Age and chronic irritation are probably the most active known factors in causing tissue to take on an abnormal growth and later a destructive process that tends to destroy the life of the individual.

AGE

While cancer may, and often does, occur in the very young, it is manifestly a disease of middle age and advanced life. We have seen cancer in the teens, in the twenties and in the thirties, but the greater number of cases develop after forty years of age. When the middle of life has been reached a natural decline begins and the resistance of the tissues is less and disease often finds a foothold and develops with little or no organized opposition. Since cancer is essentially a disease of old age, we find in this fact an explanation why cancer is on the increase, because people are living longer now in civilized countries than ever before. It has been said that if the human race could be made to live long enough we would all eventually die from cancer.

CHRONIC IRRITATION

Probably the most important factor in the process of malignant cell development, is irritation. The fact that cancer can be made to develop in perfectly normal tissue by means of chemical or mechanical irritation long continued, is proof sufficient that irritation is an important factor in the production of cancer.

WHERE DOES CANCER BEGIN?

Cancer seldom, if ever, begins in normal tissue. A careful history of every case will reveal the fact that some type of abnormal growth was present for some time before abnormal cell development began. Cancer cells frequently have their beginning in a wart, mole, cut, bruise, fissure, fever blister, ulcer, burn or old scar tissue, etc. When these abnormal lesions are located on the body where they are frequently injured, their chances of becoming malignant are much greater. The use of tobacco is considered

the greatest factor in producing cancer in the mouth and on the lips, particularly on the lower lip. This, however, is not the only cause of cancer in and about the mouth. Snaggy teeth that cut the cheek and tongue, ill fitting fillings, bridges and plates are frequently sources of enough irritation to cause injury to the gums, tongue and cheek. When this irritation is long continued cancer may be the result. In our experience, more than ninety per cent of malignant lesions in and about the mouth occur in people who use tobacco. The cigarette smoker is most likely to develop cancer on the lower lip and on the inside of the mouth because he usually smokes to excess. Now that women are smoking almost constantly, we may reasonably expect that the number of cases of cancer in and about the mouth will increase during the next decade.

PREVALENCE OF CANCER

Everything that grows and lives is subject to the destructive influence of cancer. Birds, fish, reptiles and all animals are known to have the disease. Cancer is not confined to flesh bearing creatures. Vegetables, trees and plants are often destroyed by a destructive cell growth that closely simulates cancer in the animal kingdom. The history of cancer reaches back as far as we have any records and was, no doubt, prevalent in prehistoric times. The natives of all countries, no matter how primitive, are victims of cancer. Cancer is, however, more frequent in highly civilized countries, due probably to the fact that people are living much longer under better sanitary conditions. During the early periods of human existence the span of life was about thirty years, therefore, the majority of the people died or were killed in the hunt or in tribal wars before they had reached the period in life where cancer was likely to become a factor.

SEX

More women have cancer than men, the ratio being about eight to twelve. It has been stated that in every group of eight women who reach maturity, one will have cancer, while only one in every twelve men will develop the disease.

TREATMENT OF CANCER

The only successful methods for the treatment of cancer today are surgery, roentgen rays and radium, in the hands of qualified and skillful physicians. Each patient must be thoroughly examined and the nature and extent of the growth determined. A method of treatment should be selected that, in the judgement of the physician in charge, is best calculated to remove or destroy the cancer without endangering the life of the individual. In desperate cases, heroic measures are often justifiable, and some degree of risk must be assumed by both the patient and the physician. In most cases of cancer, that method of treatment should be selected which compares favorably with other successful methods, causes the least amount of physical suffering, the least possible mortality, and leaves as a result of the treatment, the least amount of scar and deformity.

RADIOTHERAPY

Slowly but surely, radiotherapy is taking first place in the successful treatment of carcinoma. It is not an infalible cure and many cases of cancer will continue to die while under the care of those most expert in the use of radiation. If any considerable degree of success is to be attained by the radiotherapist in the treatment of cancer, he must, of necessity, have the proper qualifications and experience, ample equipment of the best possible make and all cases must be properly diagnosed and treated early. It is not enough to simply say that a case of cancer is being treated with radium or roentgen rays, and take it for granted that the cancer will be destroyed. The technic employed in radiation therapy is of the greatest possible importance. Many cases of cancer are being treated with roentgen rays for long periods of time, with a dose that will not disturb the hair around the growth.

SUPERFICIAL TECHNIC

It has been experimentally demonstrated that it requires, at least seven erythema doses of radiation to destroy squamous cell cancer. This amount of radiation produces considerable reaction which usually takes from

four to six weeks to heal. To the novice in radiation therapy, this stage in the treatment is sometimes alarming. When the doctor becomes alarmed the patient is likely to become scared and may change doctors with an unhappy result. The older method of factor determination in dose estimation was reasonably reliable. However, we now have a more dependable method in which to estimate a roentgen ray does. Instruments that measure the intensity of roentgen rays, at the point where they contact the tissues, have been brought to a high point of development and are now reasonably dependable. The unite value of roentgen rays delivered by a crooks tube has been universally adopted as the roentgen and is abbreviated by the lower case letter r. The development of these refinements in roentgen rays dose estimation is a forward step toward standardization of the dose of roentgen rays to be used in the several stages of cancer therapy. Both the superficial and deep doses must be accurately estimated and carefully administered if reliable curative results are to be regularly expected. I refrain from discussing the various technics for the administration of roentgen ray therapy, because they are too often misunderstood and may lead to disastrous results. Before a standard technique can be duplicated, the roentgen ray machine must be of standard construction and carefully calibrated by one who is competent to do this kind of work. The physician who elects to do radiation therapy should make a rather thorough study of electro-physics. By familiarizing himself with the rudiments of electricity many of the difficult problems that will constantly confront him, as his work develops, will be made much simpler and easier.

INTRAORAL RADIATION THERAPY

Except as a supplement to the use of radium, roentgen ray therapy inside of the mouth is not to be considered. Early radiation technic on the inside of the mouth, consisted in the use of radium element in capsules applied against the lesions with indifferent filters and the interstitial use of steel needles containing as much as twelve

and a half milligrams of radium element. This technic often caused a great deal of tissue necrosis with pain and discomfort. Healing was slow and the consequent fibrosis, scar and deformity were distressing. Later, radium emanations in gold seeds seemed to overcome this disadvantage but it was soon found that even though the seeds could be obtained in distant locations the filtration was not sufficient to choke out all of the beta rays and a certain amount of necrosis and pain were still an element of radium therapy when gold seeds were used. Regaud of Paris, director of the Curie Institute, had long advocated the interstitial use of small amounts of radium element filtered with a sufficient amount of platinum to absorb or obstruct all but the pure gamma rays. Cade of London, later modified Regaud's technic, in which he advocated platinum needles containing 0.6 mg. of radium element to the centimeter length of the needle. The walls of these needles were to be not less than 0.5 mm. thick. It has been determined that radium platinum needles of this character when inserted into the tissues will destroy a cubic centimeter of squamous cell cancer in seven days. The needles are to be inserted around the growth in normal tissue. They are to be placed one centimeter apart and made to pass well under the growth. The needles are pushed in beneath the skin and firmly anchored with a deep stitch in the normal tissues. A radiogram should be made to determine the positions of the needles. Should they not be in order one or more of the needles may be removed and reinserted. Before insertion the needles are threaded on to a double strand of strong dental floss. After the needles have been anchored one strand of the thread is cut away and the other used to protect the needle from being lost. All threads attached to the needles are twisted together, threaded through the eye of a small linen tag on which is printed in red letters, RADIUM, DO NOT REMOVE OR THROW AWAY. Should one of the radium needles slough out as is some times the case, it must be reinserted. The pain and discomfort from the presence

of ten to fifteen of these needles in the tongue or other parts of the mouth, is surprisingly small. There is no sloughing, no necrosis of the soft tissues or in the bone and the treatment is followed by the least possible amount of scar and fibrosis. Eight of these platinum radium needles in the tongue for eight days completely destroyed a squamous cell cancer. In two months time the tongue had assumed its normal shape, was smooth, soft and its function was scarcely interfered with. In squamous cell cancer along the alveolar margins, the platinum radium needles were placed parallel with and against the bone where they were allowed to remain for seven days. There was no radium osteomyelitis or other untoward effects so common when the steel needles were used. In the treatment of large intraoral malignant lesion, the interstitial use of the radium platinum needles may be supplemented by the superficial use of highly filtered radium packs, using from fifty to one hundred milligrams of radium element. The radium packs are held in position by means of lead strips after the method of Grier and Pfahler. When thought necessary highly filtered, high voltage roentgen rays may be applied over the area covered by the radium packs. The amount of combined radium and roentgen rays that the tissues will stand without injury is truly remarkable. The secret of this is HIGH FILTRATION.

Reports from the Memorial Hospital, New York, bear out our own experience with regard to the fact that early carcinoma on the lower lip and on the inside of the mouth seldom metastasizes early. Extensive block dissections in these cases, when properly treated by means of radiation, is unnecessary. Deep prophylactic radiation over the adjacent lymph nodes is always an essential part of the technic in each case even though the glands are not indurated.

These cases are kept in the hospital during the time the radium needles are in use. They should be seen one or more times each day. The mouth must be kept clean as possible by frequently washing it out with a mild alkaline solution. The patient must be

made comfortable by giving him as much consideration as you would your most complicated surgical case. The results from the newer method of radiation technic have been so universally good, even in well advanced cases of cancer in the mouth, that we have been encouraged to make these reports and speak with confidence for its future.

CONCLUSIONS

Probably no less than ninety per cent of the responsibility for materially lowering the present death rate from cancer in this country rests upon the shoulders of the medical profession. Tuberculosis has been almost conquered, why not cancer? If we are to lower the terrible death toll that cancer is now talking from among us, it can only be accomplished through a determined concerted effort on the part of the physicians of the United States. Radiation therapy is now doing its part, it can do much more when wisely employed in earlier cases. It is not going to far when we make the statement that, one hundred per cent of early cases of cancer of the skin can be cured by radiation. While intraoral cancer is a more difficult problem, it is now yielding to a combined use of interstitial and external radiation in a manner that bids fair to rival the good results of radiation in the treatment of superficial malignant lesions. Our duty to those who are afflicted with cancer is plain. Are we equal to the responsibility?

AVERTIN ANESTHESIA*

CLYDE BROOKS, M. D.

NEW ORLEANS.

Avertin, or tribrom ethanol, CBr_3CH_2OH , was first prepared by Willstater and Duisberg.¹ It was called by them: "Avertin." It

H H

is equivalent to ethyl alcohol, $HC-C-O-H$,

H H

with three hydrogen atoms displaced by

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†From the Department of Pharmacology of Louisiana State University Medical Center, New Orleans.

Br H
three bromine atoms Br C—C—OH. The
Br H

elimination of avertin was first studied by Endoh² who showed that avertin forms a couple compound with glycuronic acid, in which form it is excreted by the kidneys. It is rapidly detoxicated and eliminated in this way. Eichholtz,³ after trying it out on animals, introduced avertin into the clinic, using it on human patients. He reported that he found avertin to be a very satisfactory general surgical anesthetic.

It was then widely introduced by Butzengeiger⁴ as a general surgical anesthetic, or as a basal anesthetic, with ether, ethylene, or nitrous oxide added to the basal dose of avertin.

There have been a rather large number of fatalities reported by Eichholtz⁵ in Europe, and by Lundy⁶ in this country. It seems that the number of fatalities are at least equal to those of chloroform. In the fatal cases with avertin, it has been observed that there is a serious fall of blood pressure and a marked slowing of respiration. These effects are also frequently noted in non-fatal cases.

The avertin anesthesia has certain advantages: it is given per rectum while the patient is in bed. So its use is not attended with excitement. The patient falls asleep in bed, and knows nothing of what goes on afterward. After the operation the patient usually sleeps for several hours, and awakes without much headache, nausea, or other unhappy results. So it is a pleasant anesthetic, from the standpoint of the patient. One patient often requests the rectal anesthesia, after talking it over with other patients in the ward, who have already had avertin anesthesia. The fact that the avertin is administered in a calculated measured dose is attractive to most surgeons.

However, after the rectal administration of the avertin, it is fifteen to twenty minutes before anesthesia is well marked. This sometimes involves the loss of valuable time, which is not so attractive to the hard pressed busy surgeon.

The dose now usually employed for basal anesthesia is from 75 to 100 mgm. of avertin per kilo of body weight. At first, especially in Germany, larger dosage was employed: 125 mgm. per kilo, 150 mgm. or more being quite commonly used.

It has been suggested in some papers that the fatalities reported are perhaps due to over dosage. But Eichholtz⁵ found that many of the fatalities occurred in dosage of 100 mgm. or less per kilo.

Avertin anesthesia is contra-indicated in cases with liver disease, acidosis, tuberculosis, or renal disorder.

The action of avertin in rabbits with impaired kidney function (acute nephritis induced by bichloride of mercury)⁷ is shown by the following tables and charts.

It is noted that it required 250 to 300 mgm. of avertin to induce surgical anesthesia in the normal rabbit, while 200 to 250 mgm. per kilo was sufficient for this purpose in the nephritic rabbit.

Also the fatal dose for the normal rabbit, is 450 to 500 mgm. per kilo, while the fatal dose for the nephritic rabbit is only 300 to 350 mgm. per kilo.

So there is an extremely small margin of safety between anesthesia and death in the nephritic rabbit. Even in the normal rabbit the margin of safety is not large.

So the indication is that avertin is unsafe for the patient who has damaged kidneys.

Avertin appears to be very useful in cases of tetanus. The dose here may be 100 mgm. per kilo given every 6 to 8 hrs. to suppress convulsions. This may be continued for two or three days, or longer if necessary. In general it is my opinion that avertin is not yet well established as a safe general anesthetic. But I believe I would prefer it to the barbituric acid compounds.

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NORMAL				
DOSE MGM. per KGM.	RATE OF RESPIRATION	DURATION OF SLEEP	ANAESTHESIA	FINAL EFFECT
25	144	0 MIN.	NEGATIVE	RECOVERED
50	100	12½ "	"	"
100	80	19 "	"	"
150	42	26 "	"	"
200	34	42 "	SLIGHT	"
250	34	45 "	FAIR	"
300	32	51 "	SURGICAL	"
350	26	77 "	"	"
400	12	164 "	"	"
450	M.L.D.	M.L.D.	M.L.D.	DIED

TABLE I. NORMAL RABBITS
NEPHRITIC

DOSE MGM. per KGM.	RATE OF RESPIRATION	DURATION OF SLEEP	ANAESTHESIA	FINAL EFFECT
25	66	11 MIN.	NEGATIVE	RECOVERED
50	44	15 "	"	"
100	32	38 "	"	"
150	28	45 "	SLIGHT	"
200	23	50 "	FAIR	"
250	18	108 "	SURGICAL	"
300	16	112 "	"	"
350	M.L.D.	M.L.D.	M.L.D.	DIED

TABLE II. NEPHRITIC RABBITS

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DISCUSSION

Dr. Loria: Almost from the time that I heard of avertin in New Orleans, I have been particularly interested in its use clinically, and I have had the good fortune to use it in a large number of cases. I have used the drug in approximately 175 cases now, most of them at Charity Hospital in the service of Dr. M. J. Gelpi. We have used it in almost every type of surgical condition. That it is not the ideal anesthetic for which we are still searching I am convinced. As a basal anesthetic it has good virtues and is a very valuable addition to our armamentarium of anesthetic agents. A number of interesting experiences in its use were related before this society in November 1931.

The drug, as Dr. Brooks has said, is detoxicated in the liver, where it uses glycogen for detoxication. In the normally functioning liver detoxication occurs when it combines with glycuronic acid form urobromalic acid. It is eliminated in greatest quantity by the kidneys, approximately 50 to 80 per cent being eliminated by these organs. A smaller quantity is eliminated by the skin. One of the questions that arose in our work was whether or not the drug had any ill effect on the kidneys of patients that were operated upon. We knew from

the literature that one contra-indication was a damaged kidney, so that any patient presenting abnormal urinary findings was not given avertin. In a large number of cases the urine was tested within from 12 to 24 hours following operation. In no instance did we note any chemical change that might indicate the kidney had been damaged by the effect of the urobromalic acid which had passed through. In no instance were we able to find casts. The only change noted was a change in its color, which, for a period of from about 18 to 24 hours, was always definitely tan or dark brown getting lighter as time went on. This was, of course, an interesting fact. I did not emphasize it at the time I presented my paper on clinical experiences with this drug and am happy to be given an opportunity to say something about it tonight.

So far as the place of avertin in surgery is concerned, of course as Dr. Brooks has said, it is yet new and a great deal is to be learned about it. However, we have been told, I think by Lundy himself, that the drug has been used in over 300,000 cases in Germany, with very satisfactory results. Up to the time that I read the little presentation I made here, they had used it in Baltimore in approximately 3,000 cases, without any deaths, and the men who had used it there seemed to be rather enthusiastic. Of course, they recommended it simply as a basal anesthetic and my personal experience leads me to the same conclusion. In a percentage of cases amounting to anywhere from 10

to 20, the patient may be operated upon without the necessity for an additional anesthetic. However, in the greatest number it is necessary that an additional anesthetic be used. In our series, we used ether, as a rule. We sometimes used ethylene, and in my thyroid cases I used nitrous oxide and oxygen.

I am now using the drug in my private practice and I find it very satisfactory. I have found no reason to discontinue its use at this time. It seems not to have found any popularity in New Orleans, and I understand that the service on which I started it at Charity Hospital, and also Dr. Gage's service, has discontinued its use.

Dr. Brooks (closing): I deeply appreciate the thorough discussion of the paper. I was very much interested to know that some here are trying avertin. I have in mind to carry out another series of experiments to try avertin on rabbits which are anemic. I have heard it stated that, if the patient is anemic, he will not be a good subject for avertin. I should be glad to hear from any surgeons who are using avertin to know how they get along with cases of anemia.

It is possible for a very skillful anesthetist to use a dangerous anesthetic for a long time without having a death. But each case might have been subject to grave danger. Over a long period of time, we might review the accumulation of statistics, and prove whether the anesthetic is dangerous or not.

In the meantime, the pharmacologist should test the toxicity of these new anesthetics, and report results, as I have tried to do here. In this way the surgeon may be put on his guard in those cases where there is unusual danger. This is the first time avertin on the damaged kidney has been systematically studied on animals in the laboratory.

THE TYPHOID CARRIER*

N. C. KNIGHT, M. D.†

INDIANOLA, MISS.

As you all realize, this is a very broad subject, and in this paper I do not profess to cover all angles of it in minute detail.

The typhoid carrier has been known for a long time. Budd, in his book on typhoid fever written in 1828, made definite hints which pointed to the carrier, but he did not

know definitely that there was a carrier. He believed it but he could not prove it. Physicians first began to take notice of the typhoid carrier about 1900 when Horton-Smith called attention to the chronic urinary typhoid carrier. Koch, in his address in November of 1902, brought out the significance of the typhoid carrier as an epidemiological factor. The discovery of the intestinal typhoid carrier was the natural outcome of the bacteriological study of convalescents as recommended by Koch. Frosh, in 1903, was the first to emphasize the relationship of the typhoid carrier to infection of others. Along about this time Drigalski and Donitz were doing work along the same line, and it was Drigalski who first discovered a chronic female carrier who apparently had no history of an attack of typhoid fever. Since these discoveries were made it has become an established fact that typhoid patients and others often are carriers, and as such are a menace to the community.

The demonstration that many persons are carriers is one of the most important advances in preventive medicine, and throws a new light on the control of typhoid fever. However, coincident with this knowledge has come a realization of added difficulties; namely, discovery and control of carriers. The adequate control of carriers constitutes one of the most perplexing problems which we have to deal with.

In connection with the carrier problem I would like to add a few words about the so-called "missed cases". By missed cases I mean the mild and the atypical cases of typhoid which are not recognized clinically, or which are not seen by a physician. All diseases vary in severity and in practically all, especially the infectious diseases, there is evidence to indicate that in numerous instances the attacks are so mild and abortive that they escape notice. Sometimes even the patient himself may not know that he is sick. These mild cases go about their work in our homes, in our eating places, handling food, attend public gatherings, etc., and thus constitute a prolific source for spreading the infection. These missed cases are an impor-

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tant factor in preventive medicine and for all intent and purpose seem to present essentially the same problem as the carrier. In fact, some authorities include these missed cases in their classification of carriers.

It has been proven that the number of carriers is more or less directly proportional to the prevalence of the disease. Therefore, the number of carriers decrease as a result of any successful means directed against the clinical cases alone. Thus, specific immunization, quarantine and isolation, personal hygiene instruction, all operate not only in the interest of reducing cases of infection, but also in decreasing the number of carriers.

Sanitary measures such as the safe-guarding and purification of water supplies, installation of safe methods of sewage disposal, supervision and pasteurization of milk supplies, screening methods, cause both a decline in the amount of infection and a decrease in the prevalence of carriers. It is evident that infected water and milk will not only cause many diseases directly in the persons drinking these fluids, but may possibly produce carriers who pass the organisms on to susceptible persons in a more concentrated and more virulent form.

Carriers explain many things in the epidemiology of typhoid. It is not only through them that the infection is spread, but the infection itself is kept alive in the carriers, who bridge over the interval between cases and outbreaks. The sudden appearance and peculiar distribution of sporadic cases is explained on this basis; also the beginning and prolongation of some epidemics. The fact is generally recognized that many water borne or milk borne epidemics result from carrier contamination of these conveyors of infection. When sporadic cases of typhoid occur, or when the first case of an epidemic occurs, some people proceed to dig up evidence to account for the case on the basis of the patient having come in contact with some object such as a book, or pieces of clothing, or some other inanimate object which was in the possession of some person with the same disease months or years before. As sanitarians we recognize

that deductions such as these are wrong, and the correction of these erroneous conceptions and beliefs, in the interest of more effective typhoid control, becomes an urgent responsibility. We must teach the laity that man himself is the one great source of typhoid organisms and that typhoid must be fought, recognising that the infection is spread from man to man, by man.

At the present time there is greater universal effort to control the typhoid carrier than any other. According to statistics, about 18 to 20 per cent of cases continue to discharge typhoid bacilli for three or four weeks after the disease has terminated, and about 10 per cent for 8 to 12 weeks; these may be classified as convalescent carriers. From 2 to 4 per cent of all cases continue to discharge typhoid bacilli indefinitely; these may be called chronic carriers. Typhoid bacilli are occasionally found in the stools or urine of persons without a clinical history of having had the disease. These may be called passive carriers, but at the same time we must keep in mind that it is probable that these persons may have suffered from typhoid fever in a light and atypical form which was forgotten. The percentage of typhoid carriers naturally varies with time, place, and especially with the prevalence of the disease. The intermittent discharge of the typhoid bacillus by those harboring the organisms has been proven. Some authorities also suggest a seasonal period of danger, the summertime being considered more dangerous than other seasons. Some men think that this is probably due to the frequent digestive disturbances which occur during the summer season. The intermittent dangers may also possibly be due to the fact that a carrier may be discharging the organisms in too small numbers to be of more than occasional significance. Furthermore, there is evidence to indicate a variation in the virulence of the organism carried, which naturally makes some typhoid carriers more dangerous than others, and, of course, the personal habits of the individual carrier are of fundamental importance as a factor in the transmission of the disease.

Statistics show that the greater majority of typhoid carriers are females. It is now well understood that typhoid bacilli localize and maintain themselves in the gall bladder and bile ducts, which are the sources of the typhoid bacilli found in fecal carriers, and females appear to be more susceptible to inflammation of the gall bladder and bile ducts than males. These facts are very important in looking for carriers, special attention being given to women who give a history of symptoms, however slight, in connection with the gall bladder or liver. The importance of females who become typhoid carriers is brought out very emphatically when we bear in mind their intimate association with the preparation and handling of our food.

Typhoid carriers are either intestinal or urinary, or both. The intestinal type is more frequent and apparently more dangerous; I mean to say that most outbreaks of typhoid fever traced to carriers turn out to be due to persons who discharge the typhoid bacilli in the feces, rather than in the urine.

The Widal is positive in the blood of a large percentage of typhoid carriers and is of a certain amount of value as a preliminary test in the epidemiological search for carriers. However, it is not a pathognomonic sign, as other conditions which produce a prolonged temperature also may produce a positive Widal. Furthermore, a negative Widal does not rule out a carrier.

Typhoid fever does not take the great toll of human lives that it did up until the close of the last century. Comparative freedom from widespread outbreaks of the disease is a result of safeguarded municipal water supplies, better protection of milk and other raw foods and the installation of safe methods of sewage disposal.

Three important procedures open to health officials for discovery of typhoid carriers are as follows: (1) The requirement of repeated negative cultures from specimens of both stool and urine from all convalescent patients of typhoid fever before release from supervision. (2) Routine and regular examination

of feces and urine specimens on all food handlers. (3) The epidemiological study of known cases of the disease. The value of these or any other methods is directly proportional to the effectiveness with which they are carried out.

Whatever method, or methods, are used to discover the typhoid carrier, after discovery some attempt must be made to control them. And that is a real problem. Most physicians are agreed as to the hygienic measures necessary. That is, safe waste disposal, withdrawal from the privilege of handling food, and instructions in personal hygiene. Also, most health officials require periodic information as to their whereabouts and the occupation in which they are engaged and urge immunization of the surrounding community, as well as frequent analyses of water and milk supplies in that community. The great difficulty is keeping up with the carrier.

Except in rural areas typhoid fever has now come to the point where it will be affected very little by better sanitary engineering and food control. Where these safeguards exist in our cities, further reduction of the disease becomes an epidemiologic rather than an engineering problem, because in most of the present cases of the disease where the source of infection is traced it is found to be due to direct or indirect contact with some carrier, or to food or water contaminated by a carrier. In other words, if the incidence of typhoid fever is to be further reduced among our urban population, health officials must discover the carriers of the disease and prevent them from spreading the infection.

In our rural sections the control of typhoid fever at the present time is a problem quite different from that of the cities. Sad to say, in our rural areas insanitation is still the rule and the disease has been forced, through modern sanitation, from its former principal habitat in the cities to a more favorable and secure residence in the rural areas. Most of our rural areas still afford an ideal place for the propagation of filth borne disease, and in most instances the disease is carrier borne,

since conditions are such as to predispose to this mode of infection. Under these conditions carrier control becomes a real problem. It is generally conceded that sanitation is the real efficient means of clearing up this condition. Since there is no law to require the rural home owner to sanitize and provide safe waste disposal, I think you will all agree that education is our best weapon. We must show the rural population just what it means. We **MUST** break the chain between the carrier and the subsequent case by providing safe waste disposal, protecting and purifying water supplies, safeguarding milk and other raw foods, and instructing the carrier in methods of personal hygiene. These measures will materially reduce the incidence of typhoid fever, and as a result will effect a sufficient reduction in our rural carrier population to bring this problem within the bounds of practical control, as it now exists in our cities.

ORAL CONDITIONS WHICH THE PHYSICIAN SHOULD NOTE*

FREDERICK J. WOLFE, D.D.S.

NEW ORLEANS

It is a pleasure to appear before you this evening and present my views of oral conditions which I believe the physician should take cognizance of in his diagnosis and treatment of disease.

Since the advent of focal infection we find the physician daily referring cases to the dentist for oral roentgen ray examination, especially when he sees a gold crown or bridge, hoping that a dental foci might be uncovered that will aid him in his diagnosis and treatment; while on the other hand two of the greatest mischief makers are overlooked, namely: oral filth and missing teeth.

In the past, before focal infection of dental origin had been uncovered and proven, the

dental profession had largely confined its efforts to replacing what the ravages of dental disease had torn away. But today we are making great strides forward, and the oral cavity is being given greater consideration from a health standpoint. We know that dental caries is an incurable disease. It is the most universally prevalent disease ravaging the mouths and thus undermining the health of children as well as adults, and while dietary conditions are a contributing factor, the real cause of dental decay is filth, which promotes the growth of bacteria and the formation of lactic acid, thus destroying the enamel, after which the dentin of the tooth is easy prey to the ravages of decay.

How can any disease be treated successfully without ideal sanitary conditions in the oral cavity?

Dr. Thomas of New York City, made the statement that it was his belief based on clinical observation that every case of measles that terminated fatally, came, not directly from the disease, but from unsanitary conditions arising in the oral cavity.

An article published by the American Society for the control of cancer, reads as follows: "Bacteriologically the mouth is the dirtiest cavity in the body and the offending bacteria are of highly pathogenic types."

Dr. Chas. Mayo says that 80 per cent of all disease arises in the mouth, nose and throat, and that 90 per cent of all deaths occur as the result of disease arising in this area.

The following are a few of my own observations which has convinced me that we are not giving enough consideration to sanitation of the oral cavity in the treatment of disease.

CASE REPORTS

- CASE 1. Child 3½ years of age, suffering with anemia, had never eaten any solid food up to this age. Diet consisted of milk and milk-chocolate. Mouth examination revealed seven abscessed teeth with pus discharging sinuses, six hypertrophied pulps extruding from cavities in the teeth. Teeth were treated and filled, none were extracted; the results were remarkable.
- CASE 2. Child 4½ years of age, in the care of a pediatrician, diet prescribed excellent.

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but child had no appetite. Mouth examination revealed twelve cavities and four exposed pulps. After treatment and filling of teeth, appetite returned and child's health showed marked improvement.

CASE 3. Girl 18 years of age. Her mother stated that she had never been ill prior to her thirteenth birthday. At this age she developed an abscess on a lower first molar, and after five years of floundering around for treatment, the case came into my hands with the following conditions present. History as follows: Height 5 ft.-4", weight 83 lbs. pronounced anemic and tuberculous by three physicians. Mouth of patient filthy, with five abscessed teeth and twelve cavities present. Patient gave history of being unable to sleep more than two hours at a time. She was rejected upon application for entrance to training school for nurses. Abscessed teeth were removed, mouth placed in a sanitary condition—the necessary restorations made, and diet corrected. Within six months she weighed 126 lbs. and was accepted in the same training school.

CASE 4. Man about 48 years of age, with but few teeth, swallows crab-claw which lodges in the rectal muscle causing fistula, and at the end of a year was still suffering—having failed to respond to surgical treatment.

CASE 5. Man about 40 years of age. Mouth filthy, many teeth missing, pyorrhea with much evidence of pus. Three peritonsillar abscesses within one year.

In every case the patient had been in the care of a physician and dentist, but there seemed to be a lack of cooperation or understanding between them. Now, it is not my purpose to take any one to task for this breach or neglect, but to plead for a closer cooperation between the dentist and physician in trying to produce a normal and sanitary oral condition.

One of the Hospitals in Toronto Canada, since instituting an operative dental service in the form of a thorough oral prophylaxis, claims to have reduced post operative pneumonia over 60 per cent.

A Boston Hospital makes a similar statement. Both institutions making the pre-operative oral prophylaxis a compulsory service, no patient being allowed on the operat-

ing table until his mouth has been rendered as clean and hygienic as possible.

This is the method that should be pursued in treating all diseases and not only on the operating table. Why should the pediatrician when called in to treat a child not first ascertain the condition of the oral cavity, whether it is free from filth and decay. The physician prescribing for the adult should examine the oral cavity and determine what conditions are present, if the mouth is clean, or whether the patient has sufficient teeth to masticate food properly. We know that the saliva contains ptyalin which aids in the digestion of starches and that without thorough mastication the incorporation of this digestant is impossible, and I believe that many alimentary disturbances are caused and aggravated by the lack of thorough mastication of food, especially the starches. This was a fact in my own case, because when I corrected my hasty and careless eating all the intestinal ailments which I suffered from left me.

How can we hope to combat disease by allowing filthy mouths to exist, and how can any human being expect to enjoy good health when they are minus the necessary number of good teeth to prepare their food for digestion? Is it not a sad thing to learn that a crab-claw can pass on without one knowing it was in the gumbo until it is found lodged in the rectal muscle?

When diseases like typhoid fever, yellow fever, the bubonic plague, etc., were playing havoc what was the method used in its eradication? Sanitation. Just ponder over the records of New Orleans of 30 years ago, people were afraid to come here because of health conditions, the death rate was high and the progress of our city was at a standstill, but with the institution of sanitation, the elimination of cess-pools, cisterns, open gutters, etc., we grew by leaps and bounds and today New Orleans compares with any other city in the United States from a health standpoint.

Statistics being gathered all over the country today show the attendance in our school systems improving where the teeth of children are being cared for and oral hygiene is compulsory.

I could go on indefinitely citing cases, giving facts and figures to show the true value of ideal oral hygienic conditions. But I believe you medical men are acquainted with these conditions sufficiently.

My mission is to bring to your attention the necessity of closer observation of oral conditions. Don't stop with the question "How are your teeth"? or because you see a gold crown, rush your patient to a dentist for some roentgenograms and extraction. Never accept the patient's "Oh! Doctor, I just had my teeth fixed and they are all O.K." but provide yourself with a mouth mirror and light and take a look for yourself. Examine for missing teeth, also the gum margins of the lower molars, on the gingival side and the buccal side of the upper molars for pyorrhea. You will be surprised at the amount of filth present, even in the average mouth in these areas, and the disease brought on by it. When you find unsanitary conditions and missing teeth, why prescribe until these conditions have been cleared up? If you do not insist on sanitary conditions and a proper set of masticators, you are inviting disaster, for sooner or later the patient receiving no relief will consider you incompetent and seek other advice.

Therefore, Doctors, let us in the treatment of disease place sanitation in the key position along with the dental foci, for you may prescribe medicine, diet, roentgen rays, vaccines and what-not—but remember that sanitation has defeated disease to a greater degree of satisfaction than all the treatment and restorations can hope to ever do.

In closing, I wish to thank you again for the privilege of appearing before you and sincerely hope that my few remarks will stimulate a wish for perfect oral conditions and that oral hygiene will be given an equal place in the sun with dental foci of infection.

DISCUSSION

Dr. George Upton: The mouth is a reservoir of infection. In all the hospitals, we should make it a routine procedure, whenever we have a case of lues, suspected lues, iritis, or interstitial keratitis,

immediately we should send the patient to the dentist to have teeth examined and roentgenogram made. Especially in children, often their teeth are the first things which should be examined. If the mouths of these young children are examined, one will find Hutchinson's teeth, which is strongly suggestive of lues, and then one can give very rapid antileptic treatment even if we get a negative Wasserman. I have seen several cases of iritis in which I could not find the foci of infection. I had the teeth examined, and it was there infection was found. What was the result? We had the teeth extracted and the iritis disappeared.

Dr. H. H. Meyer: In regard to Hutchinson's teeth, in my mind and the minds of most men, it is an exploded theory. On many occasions you see teeth that resemble Hutchinson's, due to children's diseases. There are many diseases that it appears in.

Many systematic diseases have their original points of attack in the mouth. One is scarlet fever, which is first recognized by the findings in the mouth. There is the strawberry tongue in which papillae are greatly enlarged, the tongue being very red.

Then there is one rare disease, pemphigus, which does not have its origin always in the mouth, but I have seen one case and know of three others, two of which were in the mouth. The physician should be able to recognize that. On the other hand, the dentist should be equally in position to recognize systemic diseases that originate in the mouth, and I do not think that most of them are ad. Often we find pellagra that has its origin in the mouth. The patient goes to the dentist with a sore mouth, red gums, swollen gums, and the dentist calls it gingivitis, but it may be more serious, it may be pellagra. There are several other diseases, among which is scurvy, which is hemorrhages in the mucous tissues and membranes of the mouth, and which can be recognized by the mouth. I think the dentist, as well as the physician, should recognize these diseases by the mouth.

Dr. Lurie: I think Dr. Wolfe is to be congratulated on bringing up a subject that has been for years obtaining much publicity in its relation to disease, possibly both in medicine and dentistry. The medical profession, I believe, can best find much of its available information about oral conditions through the dental roentgenogram. The condition that is found on the roentgenogram usually is the forerunner of a medical condition. An infected tooth, a diseased pulp within a tooth, a destroyed alveolar process, either periapical or periodontal of the teeth, on the mesial or the distal sur-

face is easily portrayed on the roentgenogram. The dental film will show the degree or possible degree to which that destruction has occurred, and the possible amount of absorption that is taking place, may be of toxic moment. The presence of an unsuspected foreign body, pus, or a broken tooth filling which broke off perhaps at the time the tooth was extracted and remained in the socket, subsequently becoming encysted, and all these conditions are also of serious moment to a patient.

It was my good fortune to see a very unusual case in which the patient had had his teeth well taken care of. He developed an abscess and fistula which remained refractive to treatment, and the treatment resulted in the injection of Beck's paste into the sinuses. The sinuses healed and the condition was forgotten for a number of years. The patient developed a serious gastro-intestinal condition that was diagnosed variously from a gastric ulcer on. At operation, no ulcer was found. Then his teeth began to pain him and I had the good fortune to see him. I discovered the bismuth paste in the roof of the mouth, highly encysted. Removal of the cyst and paste relieved the condition entirely. To-day, five years after the original operation, the patient is perfectly well and has not had a recurrence of the gastric symptoms.

To refer to the diagnosis of oral conditions that interest physicians, particularly those of the teeth, their occlusion is of interest because malocclusion is not necessarily an entity which prevents the proper mastication of food. Malocclusion causes imbalance in the muscular force of mastication which is far-reaching in reflex effects. Headaches have been found to be the result of an unbalanced occlusion or caused by the patient's having a bridge or denture that is improperly set and improperly balanced. There are any number of conditions that we, as physicians ought to be interested in.

Dr. Wolfe (closing): I want to thank the members who have discussed my paper, but I think the doctors who discussed it have overlooked the points I wished to bring to you.

Namely, I am asking you to look into the mouths of your patients and find these conditions: missing teeth, decayed teeth, and filthy mouths. If you will take cognizance of these facts and see that your patients maintain clean, healthy mouths, with sufficient teeth to masticate, you will have much less trouble in the treatment of disease.

SOME OBSERVATIONS ON THE INAUGURAL SYMPTOMS OF HYPERTENSION*

SIDNEY M. COPLAND, M. D.†

NEW ORLEANS

Arterial hypertension is one of the most important, though in many respects, and especially in reference to its pathogenesis, one of the most enigmatical affections of the circulatory system. Because of the questionable origin and insidious onset of hypertension, one is especially concerned in detecting the inaugural symptoms. No less an authority than Galen stated, "Symptoms accompany diseases as the shadow follows the substance."

This study has been based on an analysis of one hundred cases of arterial hypertension that have been seen in the out-patient department of Touro Infirmary. A series of nine hundred and eighty-five medical diagnoses were reviewed, thus demonstrating the presence of hypertension in approximately 10 per cent of cases. This series of hypertensives were seen during the past two years and the incidence stated represents conditions as they exist today. The majority of the cases studied were personally observed by the essayist.

Although many state that hypertension *per se* is without subjective symptoms, the victims of the disease present such similar inaugural symptoms that an observer is prone to consider certain symptoms characteristic. The census of opinion favors the hypothesis that the inaugural symptoms are to be attributed to pathology in systems intimately associated with the cardio-vascular system; these systems being the ones to bear the burden of increased vascular pressure.

Steiglitz¹ states that the most important statement which can be made regarding the symptoms of hypertension is that there are no symptoms. This is probably true, there-

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fore, one must be on the alert for symptoms indicating hypertension which arise from associated systems. If one develops a familiarity for these symptoms, he is afforded the advantage of early diagnosis and early therapy, thereby enhancing the prognosis.

There has been some recent discussion on the nature of the symptoms in hypertension. Davis,² claims that the symptoms occurring in patients with uncomplicated essential hypertension are those of an associated psychoneurosis. If this be true, a valuable clue as to therapy is obtained. Davis' series of one hundred hypertensives presented complaints which fall into one of twenty-five groups. In the series herein reported, there are only fifteen groups represented. Forty-six per cent of all the inaugural symptoms fall into one of two groups, namely, headache or vertigo. The one symptom which occurred most frequently was headache, thirty patients out of one hundred possessing it.

	Number of Cases	Per Cent
Headache	31	24.8
Vertigo	27	21.6
Precordialgia	14	11.2
Dyspnea	12	9.6
Nervousness	8	6.4
Symptomless	7	5.6
Weakness	6	4.8
Palpitation	5	4.0
Pedal Edema	4	3.2
Hot Flushes	4	3.2
Eye Symptoms	2	1.6
Epistaxis	2	1.6
Insomnia	1	0.8
Dyspepsia	1	0.8
Joint Pains	1	0.8

Table 1. The Incidence of Specific Inaugural Symptoms in One Hundred Cases of Essential Hypertension.

Many of the inaugural complaints were present over a long period of years, but this is plausible for the hypertension may have been present over a similar long period. A prolonged duration of the inaugural symptoms cannot be regarded as evidence favoring neurasthenia.

The symptoms in the greatest percentage of cases, 66 per cent, were one in number. Dual inaugural symptoms were present in

26 per cent of cases and in only 1 per cent of the cases were there more than two inaugural complaints. From this evidence, one is inclined to disagree with the statement that multiple inaugural complaints feature the hypertensive's history. I do think that many hypertensives harbor multiple complaints and symptoms as a result of the stigma laid upon associated organs by the elevated arterial pressure. However, these symptoms follow the inaugural symptoms, rather than occur simultaneously. The elicitation of inaugural symptoms at times call for much patience and detail of questioning. The fact that most inaugural complaints occur singly is further evidence against hypertension mimicing a neurosis.

Seven per cent of the cases failed to present any inaugural symptoms. These individuals are examples of "hypertension solitaire"³. This type of hypertension is usually detected during the course of a routine examination or an examination for a complaint referable to another system.

The relationship of the inaugural symptoms in the white race as compared to those in the black race is interesting. It has been definitely demonstrated that some racial immunity to hypertension exists in the uncivilized members of the black race; hypertension among native African negroes being practically non-existent. In the present series, fifty cases were in the white and fifty cases were in the black race. In the entire series, dual inaugural symptoms were present in 26 per cent of cases and of this number seventeen cases, or 64 per cent, were in the negro. The only case presenting three inaugural symptoms was in a colored female. One may deduce one of several possible conclusions from these facts; pathology was more advanced in the negro or the negro may possess a more unstable nervous system are two logical deductions. This last inference is dubious. The character of the symptoms do not vary in the two races. It is interesting to note that precordialgia was present in fourteen patients, eight negroes and six whites. This precordialgia is most probably due to an aortitis of hypertension or arterio-

sclerosis and yet the condition seems more frequent in the pre-senile hypertensive as will be demonstrated later.

	WHITE	COLORED
Headache	14	17
Vertigo	11	16
Precordialgia	6	8
Dyspnea	6	6
Nervousness	4	3
Symptomless	4	3
Weakness	3	3
Palpitation	1	4
Pedal Edema	1	3
Hot Flushes	2	2
Eye Symptoms	2	0
Epistaxis	2	0
Dyspepsia	0	1
Insomnia	1	0
Joint Pains	0	1
Total	59	67

Table 2. The Comparative Incidence of The On-
augural Symptoms of Essential Hyper-
tension In The White and Colored
Races.

Recently, the attention of the clinician has been focused on that group of hypertensives termed the pre-senile. Five patients in the present series were under thirty years of age and fifteen more were in their fourth decade of life. This means that 20 per cent of the series may be catalogued as pre-senile hyper-
tensives. Seventeen of this group of twenty pre-senile hypertensives were colored. The inaugural symptoms of this group are compared with the symptoms of twenty senile hypertensives, aged sixty years upwards. This comparison shows that the inaugural symptoms are very similar, both groups possessing the tendency to present single complaints.

Headache	8	7
Vertigo	5	4
Precordialgia	2	5
Symptomless	3	2
Dyspnea	5	2
Palpitation	0	2
Nervousness	1	2
Pedal Edema	2	0
Hot Flushes	1	1
Weakness	0	1
Total	27	26

Table 3. A Comparison of The Inaugural Symp-
toms Of Essential Hypertension in
Twenty Senile and Twenty Pre-Senile
Hypertensives.

It is suprising to note that "hypertension solitaire" is present in two pre-senile hyper-
tensives and in three senile. This means that this group of forty patients possess 70 per cent of the cases of "hypertension soli-
taire" occurring in the series of one hundred. From this fact one may deduce that "hyper-
tension solitaire" is most likely to occur in the extremes of life.

There are no striking discrepancies noted in the character of the symptoms in these two age groups. Headache is again the most common symptom in both groups. It should be noted that precordialgia occurs more fre-
quently in the pre-senile than in the senile hypertensive. This is unexpected for one would expect the concomitant coronary sclerosis of the senile to favor a higher per-
centage in the older group.

SUMMARY

1. The inaugural symptoms of one hun-
dred cases of essential hypertension are reviewed.
2. The inaugural symptoms of essential
hypertension do not resemble those of an
associated psycho-neurosis.
3. "Hypertension solitaire", occurred in
7 per cent of the series and is most common
in the extremes of life.
4. The negro hypertensive is more prone
to possess multiple inaugural complaints
than is the white.
5. The character of the inaugural com-
plaints in the two races resemble each other.
6. The inaugural symptoms of the pre-
senile hypertensive resemble those of the
senile save that precordialgia is more com-
mon in the pre-senile group.

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Dr. Randolph Lyons: I am afraid there is not
very much I can add to the interesting short paper
Dr. Copland has presented. I always believe that
a group of cases which has been well studied and

analyzed brings out something of value, and I think Dr. Copland has brought out several points that are certainly of great interest.

All of us feel we are pretty well familiar with hypertension. I do not suppose there is any condition that the practitioner sees more frequently. Certainly the death rate, which is some 70,000 per year of uncomplicated hypertension, and probably 70,000 more arising from complications due to this disease, makes it one of real interest to all.

If anyone had asked me what I considered the inaugural symptom, I would have felt a little bit stumped, had I not taken occasion to review a few of my own cases to refresh my mind. I rather doubt if I should have put down as most important the symptom that Dr. Copland mentions, headache, because headache is a symptom of so many conditions it is very hard to associate it as a symptom proper of hypertension. But, on looking over the records I found it quite a frequent symptom. Personally, I should have put dizziness, which he mentions, and dyspnea on exertion, and precordialgia or chest pain in the order mentioned.

Another point which interested me was the proportion of colored people with hypertension. It is a long time since I had much experience with colored patients, as I have not had the colored wards for many years, but I was under the impression that the colored race did not suffer with hypertension as much as our race. According to Dr. Copland, the proportion is almost 50 per cent. Certain races, as the Chinese, apparently suffer very little with hypertension; probably the original negro did not suffer to any extent.

The symptom of nervousness which is frequently put down among the symptoms of hypertension was rather low in his cases, and I believe that is because most of his patients were clinic patients. Neurotics suffer from hypertension as other people do.

The whole subject is one which I think is well worth discussing. A point that I would like to stress, too, is that we have difficulty in deciding, in hypertension, what is the inaugural symptom and if hypertension is responsible for a number of symptoms. Dr. Copland mentioned a certain number of cases in which there are no inaugural symptoms; the patient has a sudden hemorrhage or an attack of dizziness associated with spots before the eyes. In the latter case, the patient consults an oculist, who refers him to the physician, who finds high blood pressure. In that group, in my experience, there may be one symptom, but not an easy one to get. The patient says that before the onset of this sudden symptom he felt unusually well, he had a sense of "unusual well-being" just before the hemorrhage or whatever else initiated the attack. That is a point that has been brought

home to me on a number of occasions—probably others have had the same experience.

Dr. Eustis: This study is very illuminating to me because I had about decided that hypertension presents no symptoms. I was very much impressed last week when one of our good friends consulted me for acidity of his stomach. Upon routine examination, I found he had a systolic blood pressure of 215. The patient said he had had high blood pressure for 10 years at least, but he had no symptoms at all.

A short while ago, I had occasion to make an analysis of 500 routine office patients to see what percentage complained of headaches. Of patients coming to the office for different conditions, 51 per cent complained of headaches, which runs a little higher even than Dr. Copland's cases of essential hypertension. Further analysis of the statistics disclosed that 86 per cent of patients complaining of headaches showed evidence of intestinal toxemia.

Many years ago I read a paper before this Society on the relationship of intestinal toxemia to hypertension, and I have been interested in observing the condition ever since. We cannot get away from the fact that intestinal toxemia is a factor in the raising of blood pressures. Understand, I do not mean to say that intestinal toxemia is the cause of all hypertension; but in a large proportion of cases presenting essential hypertension—that is, a systolic pressure sometimes as high as 230—the blood pressure comes down to 150 or 160 by simply treating the intestinal toxemia. Some of the putrefactive amines are potent factors in raising blood pressure. I have raised my own from 130 to 190 by the hypodermic administration of Tyramin. The normal liver detoxicates these. In a case of hypertension, we can visualize the liver as not breaking up the toxic amines and allowing them to exercise their physiologic action with resulting increase in systolic pressure. I do not believe that the medical man, in his study of hypertension, is giving sufficient attention to the influence of intestinal toxemia, and I think it might be of interest if Dr. Copland would check over the urine reports of cases and see how many showed a heavy indicanuria. My cases show it right along.

If we allow intestinal toxemia to supervene on hepatic insufficiency, we are apt to have arterial hypertension, as a result.

Dr. Robbins: Are you able to tell us at present if the negroes were full-blooded? Were those that showed signs of hypertension in larger numbers closely approaching the white race, or were they real black? Can you give us any idea about foci of infection in this group? Can you eliminate or

rule out foci of infection? What percentage of positive Wassermanns occurred in the negro and white groups, and what bearing do you think it had on instances of hypertension? How long did the patients sit in the private office before the blood pressure was taken and did you re-check cases several times before coming to a positive diagnosis?

Dr. Musser: I think Dr. Copland's remarks are rather illuminating. I agree with Dr. Eustis that the average patient who has high blood pressure does not have symptoms, and I am rather dubious about high blood pressure itself, in many instances, as the actual cause of symptoms. I should like to know from Dr. Copland what his criteria of diagnosis are.

Dr. Lemann: Of course, one can prove nearly anything from figures. I disagree emphatically with Dr. Copland that we are justified in concluding from his series that the symptoms he has enumerated are peculiar at the two extremes of life. It just happened with this series. There is no reason for believing that the middle years are going to be without the manifestations that occur in the earlier and in the later groups.

Dr. Copland: In answer to Dr. Eustis's question, I am not prepared to say what percentage of patients presented indicanuria.

In answer to Dr. Musser, the diagnosis was made by the sphygmomanometer. If patients presented symptoms which could possibly be attributed to pathology other than arterial diseases, then the other pathology was given credit for causing the symptoms.

I did not choose 50 white and 50 colored cases but took 100 cases that occurred in the last year and a half or two years, and it so happened that 50 were white and 50 were colored. The patients were seen several times—no one reading was employed to make the diagnosis. Some have been seen weekly for a year or a year and a half. They all sat outside the clinic door anywhere from half an hour to two hours before being seen.

The negroes were for the most part coal black, but there were some high yellows. I am not prepared to say from the social history what percentage had a strain of the white race in them. Nor am I prepared to say the exact percentage of positive Wassermanns in these cases, but I think that Stokes has denied syphilis as the cause of hypertension. However, in some cases, we have seen that mixed treatment has reduced the hypertension.

The diagnosis of essential hypertension has been made on the eye signs and renal signs, plus the progressive course of the disease. It is difficult to say just what is essential hypertension and what is not. In one case, that of a patient 38 years old that I have seen several times, the blood pressure was over 160 systolic and 95 diastolic. The only

other pathology was a slight prostatitis. The only therapy administered was a sedative and prostatic massage. A week ago the patient presented hypotension and the prostatitis had cleared up. With the blood pressure readings noted when the patient was first seen, we should have been relatively safe in saying the patient most probably had essential hypertension, but we would have been wrong in this case.

THE HISTORY OF BUBONIC PLAGUE AND PERSONAL EXPERIENCES*

H. W. KNIGHT, M. D.

NEW ORLEANS

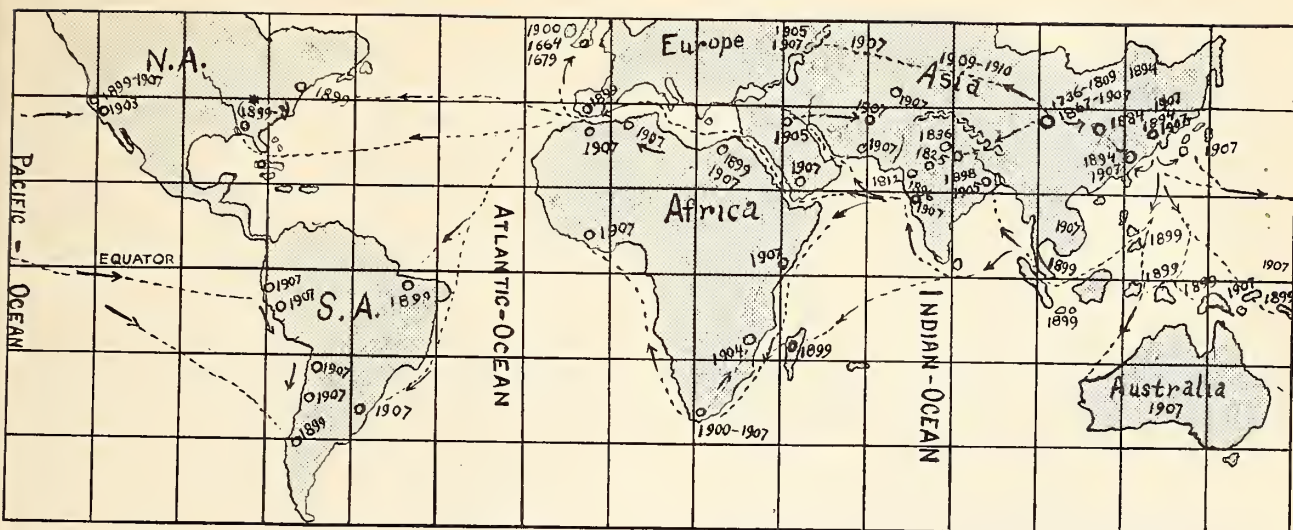
This epoch of railways, automobiles, trans-oceanic liners and aeroplanes has changed the basis of economics, trade and diplomatic relations. Likewise pandemics have presented astounding differences in the time element. For instance, in 1918, influenza was conveyed throughout the world in a few months, probably from Tibet. It is therefore very important to present the history of plague epidemics of the past with those of today in order to analyse its behavior under modern conditions.

From the misty historic past Procopius speaks of bubonic plague, showing its great antiquity. The first historic record was concerning an epidemic at Libya about 98 A.D. Samuel speaks of a disease among the army of the Philistines which also caused death among mice accompanied by "emerads in their secret parts." An outbreak of plague occurred at Pelusium A.D. 542 which became pandemic throughout North Africa reaching western Europe and Ireland, continuing 200 years. Again it appeared in the 11th century reaching its height in the 14th century and declining till the 17th century. In 1664-65 there were 70,000 deaths in England's population of 460,000. By 1884 plague ceased in Europe but continued in Western Arabia and Azeer.

In 1374, an account of quarantine laws by Count Bernado of Reggio and among the Benetians is recorded. Also, among the latter, the first isolation station was established.

*Read before the Orleans Parish Medical Society, April 25, 1932.

- PANDEMICS OF BUBONIC PLAGUE. -



The Bhagavad Purana gave the first record of plague 800 years ago and associated the disease with death among rats. Minakata presented the same idea concerning a disease between 1736 and 1809 in Yunnan, China, which was fatal to both men and rats.

From Yunnan routes for trade and pilgrims through Tibet and Afghanistan may account for the epidemics at Sindh and Gujurat in 1812 and Gardwal and Kumaon in 1823 and Delhi two years later, also the epidemic at Rohilkand in 1836. Thus a period of 27 years was involved in its spread by the slow mode of travel then used. The question is, did plague remain at Yunnan from 1809 to 1867 in a non-virulent state or was it reintroduced through Tibet after these 58 non-epidemic years.

Improved transportation by land and sea changed the picture for after 27 non-plague years at Yunnan we note that it gained a greater reach in 1894 and after 13 more years at Yunnan, there followed a world wide pandemic in a single year. The more rapid the transportation, the more widely it spread and the shorter the time required for this to take place. Never in the history of the world were so many epidemic centers developed in a single year as in 1907.

Three remarkable personages loom in the limelight during the pandemic 1894-1905. Kitasato and Yersin discovered *B. pestus* in 1894 while working at Hong Kong and Koch found plague in the interior of Africa near

the source of the White Nile in Uganda, 1898. It seems doubtful that this epidemic had any connection with the pandemic traceable from Yunnan, China.

The following can well be considered as endemic foci of plague from past history and the finding of the *B. pestus* in rodents over a considerable period of time, even when there is no epidemic:—Bengazi, Uganda, Azeer, Persia, Yunnan, Gurdwar and Kumaon, Hyderabad State and San Francisco. The animals now considered to act as hosts of *B. pestus* are brown and black rats, ground squirrels and marmot. The rat, however, is the animal which conveys the disease over-sea. There can be little question that rats have much to do with the disappearance and recurrence of plague due to their migratory habits. The full importance of the study of the habits of rats as an influence in producing epidemics and pandemics cannot be sufficiently emphasized. While it is recognized that the rat flea is the most usual intermediary host of *B. pestus* still it is quite certain that bed bugs may also convey the disease from person to person.

The flea, like all insects, must have years in which their numbers are greatly augmented, and others in which there are very few survivors in the struggle for existence. When fleas are greatly depleted in numbers, the chance of one conveying the disease from rat to man would be reduced proportionally. Also there are years in which rats

are found harboring *B. pestus* and still neither those or other rats seem to be dying from plague. When plague is causing a high human death rate, it is found that rats are dying of plague. This indicates that there is a variable virulence of *B. pestus*. This variable virulence is also demonstrated by the difference in the rate of recovery under the same treatment in epidemics in successive years. This is illustrated by government report in the Deccan where in 1922 there were 20 per cent recoveries. The virulence seemed to diminish in 1924, although government statistics are not at hand. The following year the disease seemed to assume a more virulent character and spread over a larger area. Then in 1926 the virulence and area involved were again increased, as I had only 50 per cent recoveries while in the preceding year it was much higher. The ravages of the disease must have been greater than or equal to that of 1922 because many cases occur who never have a doctor and therefore the death rate is very high.

The history of plague indicates that, once introduced into an area where rodents and fleas thrive, the disease tends to remain and the area becomes an endemic focus.

Periodicity of plague epidemics bears a distinct relation to rat migration, and possibly to the number of fleas living at different times. There seems also to be shown a variability of virulence by the death frequency of rats harboring *B. pestus* and humans who have the disease.

PERSONAL OBSERVATIONS AND EXPERIENCES

While in Bengal province and stationed at Calcutta, no real plague epidemic occurred. Cases, however, were present for reports of deaths in the province for 1920 showed 66 from plague and in 1921 there were in the province 59 deaths from that disease, 62.7 per cent of which were in Calcutta. Rats were everywhere in the city and were taken as a matter of course.

My experience with plague started in 1924 when my residence was changed to the Deccan, South India. Everything here was different. The topography, climate, rainfall, seasons, people, customs, occupation, housing,

and government were all greatly in contrast. The vital statistics for Hyderabad State record a great incidence of plague. In 1922 there were 6135 cases of plague recorded of whom 4913 died and in 1923 there were 5022 cases of whom 3824 died. Two places were recorded as endemic foci, Raichur and Gulbarga. Before I arrived at Hyderabad City, plague had reached there from the foci. All the cases which I saw that year were in villages within a radius of ten miles and they were all mild as the epidemic was on the decline. I found the population in temporary shacks some twenty rods from the villages and I devoted most of my time to inoculation with Halfkines vaccine as a prophylactic measure.

The impressions received in this first contact with plague have not been altered. There was no systematic effort on the part of the Nizam's Government to exterminate rats. The press published several suggestions as to how different people had found one way or another effective in rat extermination. Plague stations had been established but no organized force of doctors were sent directly to the people. Many cases contracted the disease and died without receiving other than home treatment by the friends. Even among the profession, there was an apparent desire to avoid being mixed up with the unpleasant affair and this may be accounted for, in great measure, to the very unsatisfactory mode of treatment and lack of recognized remedial agencies. There seemed but one effective procedure open to the people which would reduce the ravages of the disease and that was a movement to temporary huts. Isolation of the sick was not the rule. While the results from treatment are far from encouraging to the physician, still treatment will increase the patient's chance of recovery and it qualifies the doctor in the mind of the public to give advice concerning prophylaxis.

There is a need of research into a rational course of treatment and as to what can be expected from the agencies now known before we may expect to reduce the death rate among those having the disease. Hafkine's

vaccine is produced in government laboratories at a considerable cost and therefore it becomes a great burden on the budget of the health department. Realizing the impossibility of using this effective preventive as freely as small-pox vaccine, I refrained from promiscuous administration of plague vaccine and conserved my supply for use in the immediate vicinity of the plague case. This was made more effective because the temporary camps were well spread out and only from fifty to a hundred would be at one focus of plague occurrence. They had escaped the rats by going to camp and the danger, therefore, would be from the patient or from biting insects transmitting *B. pestus* from the sick to their attendants.

Laboratory research work has already fulfilled its purpose with respect to plague but there remains a very important new type of investigation which could well be termed field research. There is need of devoting time on both plague prevention and treatment in an endemic focus in order to discover a system by which the disease may be economically eradicated because there are many angles to the problem. For example, if a campaign were instituted to destroy all rats, then we would soon find that the flea was forced to the small red squirrel which is in trees, on the ground and in houses. If we then destroyed the squirrels we would find that there was another migration of rats to the region just in time to assist the squirrel of the field in their task of feeding and maintaining the flea. There is some question whether *B. pestus*, animal hosts or insect carriers can be exterminated but a way should be found to gain mastery of the situation, eliminating foci and preventing either epidemics or pandemics. This is more apparent when we recall that, even after the cause of the disease was found and the mode of conveyance between 1894 and 1900, in 1907 the greatest pandemic in history occurred in a single year and that more active centers of plague exist today than in the past, while the rapidity of transit is increasing.

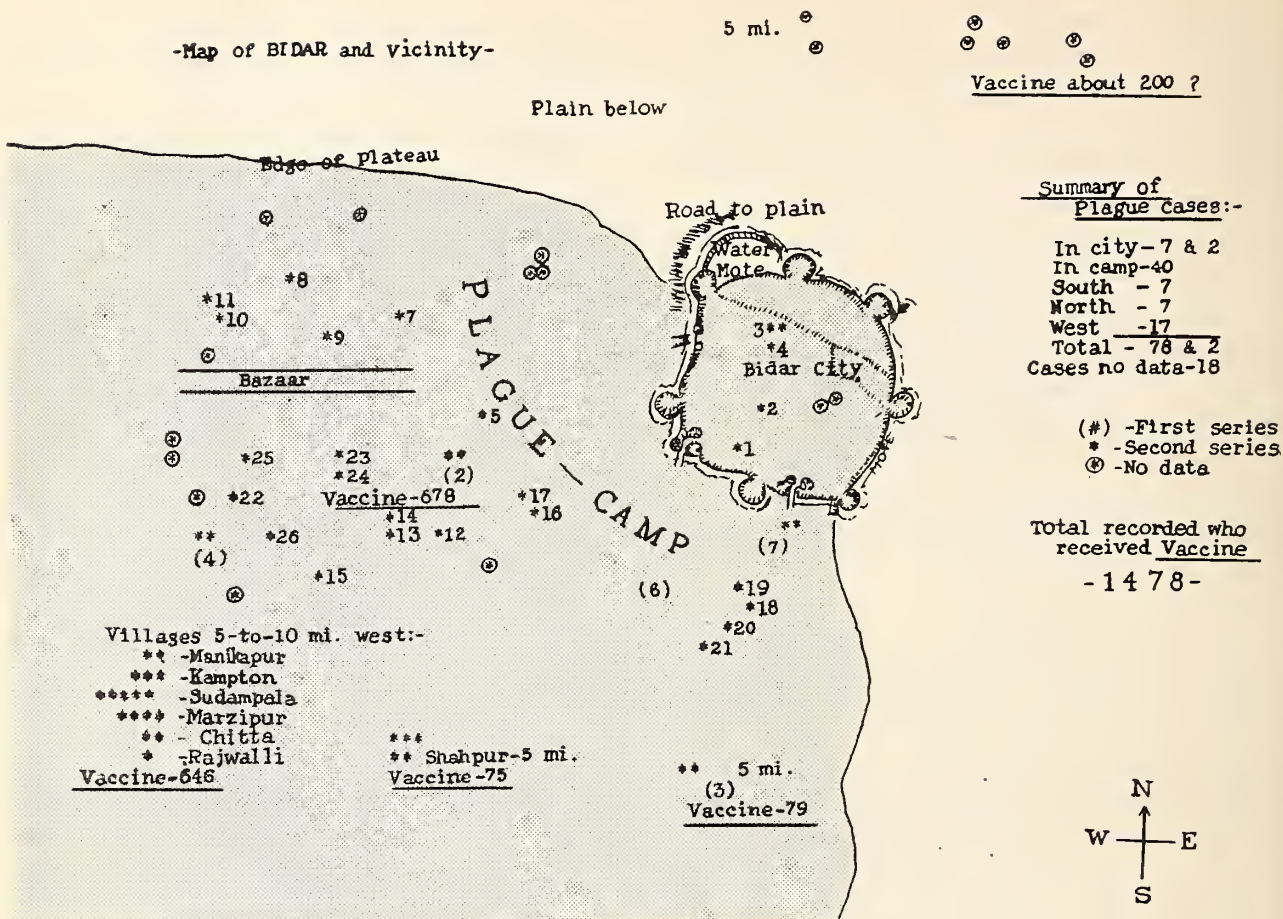
In the east leadership and organization are inadequate and consequently the incoor-

dinate efforts yield discouraging results even though great energy is expended. An important point to consider is that results must be secured among illiterate, superstitious and poverty stricken masses of people. Rat-proofing of dwellings is impossible. These facts stimulated my interest in the field-study of plague.

I was located at Bidar which is 82 miles distance from Hyderabad City. There was then no railroad between these points and long caravans of bullock carts carried produce and goods from one to the other. It was noted that when plague broke out in Hyderabad in 1924, it took two years for the epidemic to reach Bidar. Therefore, in 1925 I was called between eight and ten miles down the Hyderabad road to attend several cases of plague in a village. This observation coincided with government findings in previous waves of virulence. I was therefore expecting that a plague epidemic would reach Bidar in 1926 and I was taking all precautions.

There is another interesting and important observation concerning plague epidemics occurring in the cold season. In the warm season the grain and produce are in the field growing. Harvesting comes at the approach of the cold season and then the grain and straw are stored in close proximity to the living rooms. Even most of the roofs are made of straw and the side walls are made of mud which affords very comfortable quarters for rats or squirrels near an abundant supply of food. Rats and squirrels leave the fields soon after harvesting and then plague is manifest. Bidar is a city about five hundred years old and has a series of walls and moats seven miles long around it. The moats and areas where old ruins of the palaces are located are a mass of cactus plants and these form an ideal refuge for rodents. The cold season arrived in Bidar and my expectations were realized. I did not expect that almost simultaneously plague cases would occur in remote parts of the city among different religious groups. Within three days the entire city was being vacated and camps were formed at a distance from the city. Even the

-Map of BIDAR and vicinity-



bazaar went into camp. The only part of the camp laid out in streets was the bazaar. This exit occurred in mid-September and the epidemic lasted till January before new cases ceased to occur. It was noted that the later cases were comparatively mild in severity. I had vaccine on hand and began inoculation on the foci plan at once wherever a case of plague developed.

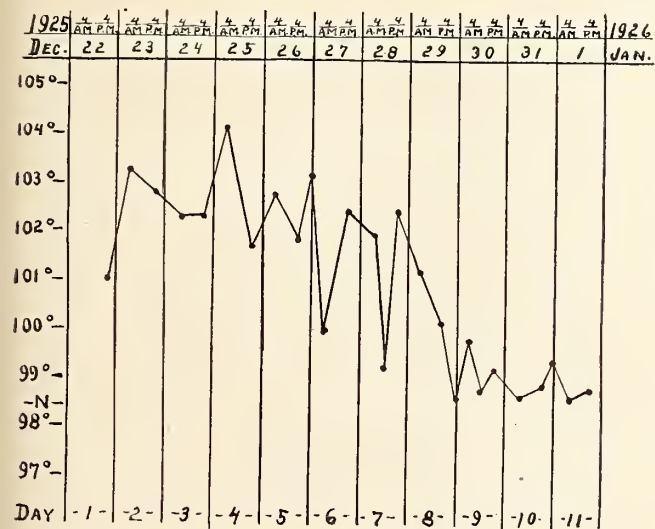
In September I treated seventeen cases of plague of whom ten died. These were located from five to ten miles from Bidar at Malkapur, Kamton, Godampalla, Marzipur, Chitta and Rajwalli. All told 646 people were vaccinated in these towns which went into camps and one of the persons vaccinated developed a mild attack of plague. A few unvaccinated cases developed plague and are included in the seventeen but it was apparent that this procedure controlled the epidemic in these villages.

Within 30 days from the time five cases were seen at Shapur, I was called to a Lingyat merchant in Bidar who died next

day of bubonic plague. Within two days I was called to a merchant of the Muslim community, who was suffering from plague and showing a skin lesion attributed to the bite of a flea. After a protracted illness this case recovered. Then the exodus from the city occurred three days after the first case and the confusion equalled the retreat from an enemy. A week from the time of seeing the first case was consumed in the wave of departure leaving behind a deserted city. It was a gruesome experience to pass down the streets and see no human being in sight. Not even a dog, ass or bullock to obstruct the way. Then came the demand for medical relief as the cases of plague increased till the disease reached its height and began to decline. There were five months of plague from August, 1926, of which three months work necessitated that I labor eighteen hours daily in order to make the circuit and see the cases once a day. While the number of calls a day were of necessity limited and the time devoted to a case was far from what it should

have been, still there is little doubt that a large number of the cases would have died and the intensity of the involvement in others would have been increased if they had no treatment. Only few notes were kept but even in their brevity they afford some idea of how the cases respond to treatment and the problems confronted in an area where five languages are spoken and where there are as many races and religions with their varied customs and castes.

-B.C. DANIEL - - BIDAR, INDIA - - BUBONIC-PLAGUE -



There were 26 cases in which notation was made. Of these there were 13 seen early and 13 seen late or after 24 hours. The same treatment was given all cases and the results secured were quite constant, that is, those seen early recovered with one exception and that was the case of septicemic plague. The cases seen after twenty-four hours died with one exception, which case recovered.

The treatment of plague is discouraging due to the high mortality and the unfavorable places for medical work. It must be observed that a large percentage of the recoveries would have died without the physician's having assisted nature. True, he has labored under conditions which are hazardous to his own life, overcoming discomforts and inconveniences but he gains the confidence of the people. The friends of the patient have gained peace of mind by the thought that everything was done which was within human power by one in whom they have faith.

Time will not permit a review of the cases

treated, the symptoms observed or the treatment given. The picture presented to the doctor is impressive. There is the congested eye, the anxious and bewildered expression, the extreme weakness and the great listlessness. The diagnosis and prognosis were never asked of the doctor, the people knew both plague and its gravity.

From a survey of my experiences at Bidar and vicinity, the following suggestions are made:—

1. Guide the people in the formation of camps to limit the disease and facilitate arrangements for medical care.

2. Guard against over-crowding of huts in camp.

3. Regulate the space for bazaars in order to facilitate scavenging, especially in the section for food and grain supply.

4. Wherever cases develop, there persuade the people to receive Hafkine's vaccine.

5. Organize sanitary squads to exterminate rats, to use kerosine and cresol against fleas and to scavenge for litter, waste foods and excreta in order to avoid attracting rats.

6. Establish a service center for incinerators where litter, waste and excreta may be burned; where unslacked lime for rat-runs, kerosine, spray guns and cresol and any other supplies may be distributed.

7. Arrange a supply of small tents for plague cases, to be pitched near the shacks of their families who may care for the patients.

8. All dead rats should be covered with kerosine and burned where they are found in order to destroy the fleas. Owing to the habits of rats and squirrels, their extermination is uncertain but much can be done by working from the outskirts toward the center. Gas cannot be used in oriental cities owing to the type of architecture.

9. The sanitary squad should receive protective vaccine and be so clothed as to protect against fleas. The feet and legs should be sprayed with kerosine before each day's work, as these parts are always exposed among the easterners.

10. The doctor attending the plague case should wear high shoes and leather puttees.

Care of the hands is difficult in going from case to case in camps but the use of rubber gloves constantly wet in bichloride of mercury solution, always keeping the same side out, affords ample protection with little inconvenience. In case of pneumonic plague or when attending a pneumonia case during a plague epidemic, it is advisable to place a handkerchief as a mask over the nose and mouth as a protection against droplets but in bubonic plague this is not necessary.

It would be very interesting to demonstrate what could be accomplished in one endemic focus looking toward the eradication of plague. This work would have to be pressed during the entire year with a careful study having been made of the local behavior of the epidemic waves and their variations in virulence. The rats, squirrels and other possible hosts of the flea would require observation as to migratory and feeding habits especially. All that we can now say is that the destruction of these animals which are susceptible to plague should be carried on prior to the cold season when they will return to the city to be followed by an outbreak of plague.

We need to determine if rats migrate along the same circle, its size and their contact with other rats traversing other circles. The study of chance contacts of other rodents with rats, thus preserving the bacilli strain or enhancing its potency. The struggle of the flea for survival and the numerical increase or decrease of fleas in nature is of great importance. The life history of the *B. pestus* as to behavior when free in nature both during an epidemic and during the period of inactivity.

The final unanswered question remains: Where and when and under what conditions does the *B. pestus* remain from season to season and from epidemic to epidemic. When this question is answered, we may find the solution to the problem of eradicating plague.

DISCUSSION

Dr. E. C. Faust: Dr. Knight has presented a most interesting and a most unique personal experience with the disease about which we tend to lose

consciousness because it is not ever present with us. If epidemics should break out in North America, we would be much more interested in a disease of this kind than we are. In this city we have adequate measures for the protection of the population, but in the part of the world where Dr. Knight has worked and where I have had eight years of service, that sort of protection does not exist. And it is in these areas that endemic foci and latent centers of infection exist from year to year, decade to decade, century to century. Wars, floods, famines, and methods of communication, particularly the more rapid methods of recent decades are responsible for the development of epidemics and new foci and pandemics throughout the world.

The introduction of rats into Europe by the crusaders was closely associated with the Black Death, particularly the second and third outbreaks of that ravishing death. In the tropics and ports of call, the preponderance of cases consists of the bubonic type conveyed by rats, but particularly in northern Asia and in California and South Africa, more localized species of rodents are responsible for its progress. Twenty-seven different species of rodents have been found to carry the infection. Furthermore, Martin, a British physician writing some 20 years ago, said that "a variation of the plague bacillus in the production of greater infectivity, with perhaps diminishing toxicity leading to a higher degree of septicemia in man, would permit of direct transmission by human fleas. Bubonic plague would then be independent of the rat and spread directly from man to man". In more fatal epidemics they might acquire (and have acquired) a greater virulence and become pneumonic in type, with direct spread by droplet infection. This latter has been the essential characteristic of the plague in Mongolia, Manchuria and Northern China during the last 30 years, particularly since 1910, with outbreaks each winter when ventilation in human habitations was reduced to a minimum.

Each season the infection in Manchuria has been introduced from Mongolia, when the hunters went out to trap marmots. Every year up to the last two or three it has been brought into Manchuria, particularly along the Chinese Eastern Railway to Harbin and Mukden. In 1921, it got as far as Peking and down into Shantung Province. It is of the endemic type. Severe epidemics have broken out almost every year in Shensi Province, about 500 and 700 miles northwest of Peking. Today you can refer to the Bulletin of the Hygienic Laboratory, a recent publication, in which you will find that during the past winter there were severe outbreaks in the following centers: In India, thousands of deaths occurred. In China, in Manchuria, where they have practically eradicated the

pneumonic type, the bubonic type has developed along the railway; in Shansi and in Shensi there are pneumonic centers in which thousands of deaths have developed; in Yunnan there is always a residuum of bubonic plague. In Madagascar about 600 deaths occurred. In Senegal, West Africa, several hundred deaths took place. In British East Africa, there were several hundred deaths. Furthermore, in one center much nearer to us here, a center of endemic focus, in Peru, there were several dozen cases and 18 recorded deaths. This is the one endemic focus in the Western Hemisphere.

Prophylaxis and treatment: there are two important methods of procedure. As a prophylactic, Haffkine's vaccine is frequently used in an effort to combat the infection where it is believed it will be introduced. It requires an injection of from 0.5 to 4 cc. of killed organisms and a second injection of larger amounts some ten days afterwards. We see very severe reactions from use of this vaccine, but it has reduced the susceptibility to approximately 75 per cent and the death rate of those who are taken with the disease to 50 per cent. In actual centers where the disease has broken out, Yersin's antiplague serum is valuable. This is a filtered preserved serum. The dead organisms are injected into horses and ten days later live organisms are injected into the horses. The serum to be effective should be used on the first or second day after the patient has taken sick. Used later than that it is usually of no value. This protects for only from 8 to 10 days. It is valuable in bubonic plague, but it is not known to be effective for septicemic or pneumonic types.

As Dr. Knight has indicated, there is no very intensive study of the plague in endemic foci to determine the nature of transmission and also the method by which disease is conserved between epidemics. In order to do this in the Orient, where the individuals are grossly ignorant and where they have peculiar religious, social and economic habits, requires a personality which is sympathetic with the native population and familiar with customs and the psychology of these people. Dr. Knight, from his personal experiences and from his sympathetic attitude and mingling with the people, has indicated to us a method by which one can proceed along these lines.

Plague Pandemic by Years

1894	1907
Yunnan	Yunnan
Canton	Canton
Hong Kong	Hong Kong
Pakhoi	Kaocho
Kaocho	Japan
1896	Indo China
Lisbon	Sandwich Isl.
Bombay	Australia

1898	New Zealand
Calcutta	San Francisco
1899	Bombay
Malay States	Hyderabad State
Lorengo	Persia
Marquez	Azeer
Mauritius	Arabia
Philippine Isl.	Alexandria
New Caledonia	Banzazi
Sandwich Isl.	Uganda
Madagascar	Capetown
Rio de Janeiro	Accra
Buenos Ayres	Brazil
Alexandria	Uruguay
New York City	Paraguay
New Orleans (?-Rats)**	Chile
1900	Peru
Glasgow	Siberia
Capetown	Russia
1904	1909
Johannesburg	Manchuria
1905	1910
Irak	Manchuria
Russia	
Calcutta	

**NOTE—An epidemic of plague in New Orleans among human hosts in 1914. In 1912, a rat infected with *B. pestus* was found in New Orleans. It is concluded that a rat infection existed dating back to 1899.

Dr. Knight (closing): The subject has been covered just about the way I wanted. We heard a voice from China and a voice from United States, all along the very lines that I wished to bring out. The idea is that we cannot be too sure of ourselves, we have to be on guard, we have to use all the measures possible because we have a constant hot-bed of plague in India.

So far as the dates in the United States are concerned, I had to get those dates from some of the text-books—Castellani, Manson, Stitt. I think it was out of some of those I secured those dates. They may be wrong, but probably they are not wrong as far as the epidemics are concerned.

With the infection spreading through our modern methods of rapid transit, where will we be when airplanes start bringing infected rodents in? You have, for instance, all heard of that disk put on the ropes of vessels when they are in port to keep the rats from running off. Many rats run down the gang-plank and down the side of the vessel. That is why I emphasize the necessity of getting back to the places in which the plague starts.

We must not be too certain that fleas are the only insets that transmit the disease. It is transmitted from person to person, possibly by bedbugs. I have very little fear of the plague if I can have high boots, leather putties, riding breeches, and

keep my sleeves down, but I never go in to a case without putting on rubber gloves. If it is of the pneumonic type, I put a piece of cloth across my face. I used bichloride solution as a disinfectant. I carried a bottle of the solution in my pack, filled a dish with it for the cloth and gloves. I threw the cloth away after each case and repeated the precautions on the next case.

As far as vessels coming into ports are concerned, I am very dubious about any method safeguarding sufficiently so that the health department won't have work on their hands.

In the handling of the disease, vaccine is very expensive and that is why I vaccinated only if the plague case was among or in immediate contact with the people, because the financial drain on the Health Department was very great and the government cannot afford it. I doubt very much if a serum treatment would be serviceable in a country like India. Theoretically it would be all right, probably, in a certain number of cases, but in a vast throng of people making only 16c a day, the people cannot pay for the serum and the government will not. What are you going to do in China and India? We must get remedial agents you can afford to give the people. In India many used tincture of iodine or Lugol's solution. I used a mix-

ture of iodine, 2 per cent, potassium iodide, 2 per cent, in distilled water, thus increased the iodine in Lugol's solution to double the portion and gave 5 c.c. to all children and 10 c.c. to adults, hypodermatically, once a day. As I saw the cases only once a day, I gave them a supply to take orally every two hours during the day, getting them well saturated with the iodine.

The disease in the chronic state affects the intestinal canal and produces an ulcerative condition, and abscesses in the spleen and liver, when it has failed to produce death. Without doubt nearly every other organ in the body is affected by the plague and if you can get the iodine in the patient's stomach you are doing a certain amount of good. We did not cure all cases, but we reduced the death rate. So many cases had no treatment is why the death rate was high. In my treated cases there was about 50 per cent recovery but that is a higher percentage of recoveries than you get from government statistics which includes the many patients who never have treatment.

I want to impress upon you two things—look out for the bedbug as a conveyor of the disease and look out for steamers coming into ports depending on the disks on the hawsers as a preventive of rats getting ashore.

CASE REPORTS AND CLINICAL SUGGESTIONS

TULAREMIA REPORT OF CASE

L. L. KAHN, M. D.

RAYNE, LA.

Tularemia is an infectious disease caused by *Bacterium tularense*. Primarily it occurs in nature as a fatal bacteremia of wild rodents, especially rabbits and hares. Secondly it is a disease of man, transmitted from rodents to man by the bite of an infected blood-sucking fly or tick, or by contamination of his hands or his conjunctival sac with portions of the internal organs or with the body fluids of infected rodents, flies or ticks. The disease was named tularemia on account of the presence in the blood of the causative micro-organism.

From January through June 11, 1932, there were thirty-three cases reported to the Bureau of Communicable Diseases of the State Department of Health. There have been no reported cases of tularemia during 1931 through June 11, 1932 from the immediate

section in which this case was contracted. During the present year five cases have been reported from St. Mary Parish, four from Iberville, five from Terrebonne, one from St. Landry and the other cases in the northern part of the state.

CASE REPORT

L. F. S., a farmer, aged forty-five years, was first seen at his home on May 16, 1932.

Chief Complaint. Headache, aching pains in limbs and fever.

Present Illness. Three days ago the patient spent the day in the woods. He was bitten on the right shoulder by an insect that he thought was a tick. He thought nothing of this incident and kept on his usual occupation, that of farming, until the morning of May 16 when he woke up with a chill which was followed by a fever with marked pains all over his body and a severe headache. He noticed that the glands close to the place where he had been bitten were swollen and tender on pressure. The patient states this is the first time he has been in bed with any illness as long as he can remember, although he has been suffering from backache for the last five months.

Physical Examination. The examination of the pa-

tient reveals a well developed and fairly well nourished white male lying quietly in bed, mentally alert but feverish, prostrated, apparently suffering some acute infection.

The skin over the right shoulder showed an inflamed papule about the size of a dime with a black central necrotic area. The adjacent supraclavicular glands were enlarged and painful to pressure. There were no other lymph glands palpable. The head and neck were otherwise normal. The chest showed no pathological findings. The abdomen and extremities were normal. The temperature was 101.5°.

Progress Notes. 5/18/32. Specimen of blood did not show the typical agglutination with *Bacillus tularensis*. Temperature 99°. Patient still has pains in limbs and feels weak. The papule on the shoulder has broken down and now has developed into an ulcer about three-fourths of an inch in diameter having a punched-out appearance. The glands are more tender and somewhat softer than on the first examination.

5/23/32. The fever continues to be septic in character averaging in the morning about 99° and in the afternoon 101°. The ulcer has become larger and is now about an inch in diameter and has a punched-out appearance. The glands are soft.

5/28/32. The ulcer has undergone some slight regression. The glands were incised and about two ounces of a greenish pus was evacuated. A drain was kept in for twenty-four hours. The temperature is 101.5°.

5/30/32. Specimen of blood showed the typical agglutination with *Bacillus tularensis* in dilution 1-240.

6/10/32. The ulcer has become much shallower and somewhat smaller, the glands have undergone some regression. The temperature is 100°. The patient feels fairly well except that he is weak.

6/14/32. Patient has not had any fever in three days. Ulcer has practically healed; glands have disappeared. Feels well except for weakness.

SUMMARY

The occurrence of a case of tularemia in a section of Louisiana where no case has been reported in over two years indicates that the disease is endemic in all parts of Louisiana and if the disease is kept in mind, no difficulty need be experienced in diagnosing this condition and confirming the diagnosis with serological examination.

TWO SUGGESTIONS: (a) A METHOD OF SECURING THE CO-OPERATION OF THE PATIENT FOR AUSCULTATION AND (b) A TECHNIC FOR HYPODERMIC INJECTION

OSCAR W. BETHEA, M. D.

NEW ORLEANS

In the diagnosis of diseases of the chest there is so often an element of uncertainty as to the interpretation of findings, that any additional aid may be welcome.

I have often found it difficult or impossible to secure that perfect co-operation of the patient that would give me the best results on auscultation. They breathe too fast or too slow; the respiratory cycle is too ample or not enough. They retain too much residual air or too little. They breathe in a jerky manner or in any one or more of a variety of ways, obscure the findings.

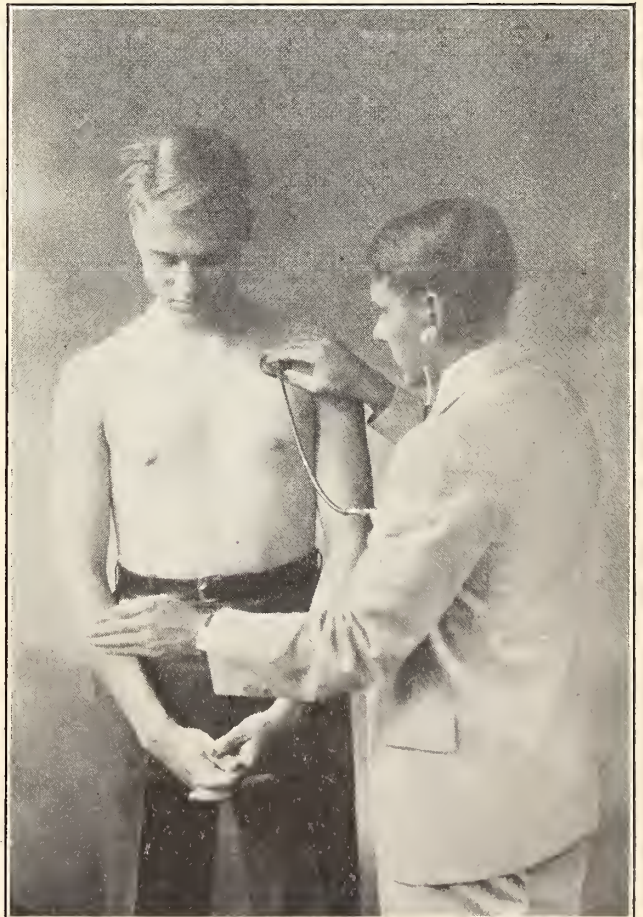


Figure 1.

For each individual chest there is a respiratory rate depth and rhythm that will enable the examiner with his particular stethoscope under the existing conditions of environment to secure the best results.

I have tried various schemes such as telling the patient to breathe faster or deeper or, placing my face close to that of the patient and having him breathe in time with me, but of late years have adopted the following plan as the most satisfactory.

I hold the chest piece of the stethoscope over an apex with one hand and instruct the patient to watch my other hand and let it direct his breathing. He inhales as the hand is raised and exhales as it is lowered, the rate, amplitude and rhythm being controlled till that cycle of respiratory movement is determined which is best for that particular case. The patient is then told to continue to breathe in that way, and my free hand is dropped from sight. Should further changes

be necessary I resort to a repetition of the same type of directions.

A TECHNIC FOR HYPODERMIC INJECTION

The usual plan is to pinch up the patient's skin with the thumb and index finger of one hand and insert the needle into this fold of tissue. I believe that there is less discomfort attendant upon a procedure such as shown here.

The thumb of one hand is placed just below the proposed site of injection and firm pressure exerted inward and downward as the needle is inserted obliquely just above. This tends to tighten and thin the skin instead of condensing it.

REPORT OF A CASE OF AGRANULOCYTIC ANGINA TREATED WITH PENTOSE NUCLEOTIDE K96

D. O. WRIGHT, M. D.†

NEW ORLEANS

The results of nucleotide therapy in sixty-nine cases of agranulocytic angina and malignant neutropenia have been reported by Jackson, Parker and Taylor (1, 2). They report that a few young polymorphonuclear neutrophils may appear within 48 hours after treatment is started but a pronounced improvement does not occur until the fourth or fifth day of treatment.

CASE REPORT

B. P., a white male, aged 57, was admitted to the Charity Hospital 8-8-32 with the complaint of sore throat for three days. This throat condition developed three days before admission to the hospital. The following day the throat was still more painful and fever appeared for the first time. He had the usual symptoms of dysphagia associated with sore throat. He had never had any severe illnesses in the past and the physical examination showed an elderly white male, acutely ill and slightly irrational. Examination of the head was unimportant except for the mouth which showed bad oral hygiene. The tonsils were enlarged and reddened. The left tonsil was partly covered by a definitely ulcerative necrotic lesion. The peritonsillar tissue and uvula were red and edematous. The glands of the neck were enlarged, hard and tender. Physical examination otherwise was of no importance.

On admission to the ward the patient had temperature of 102.8° and for the next six days the temperature remained up between 101°-104°. The

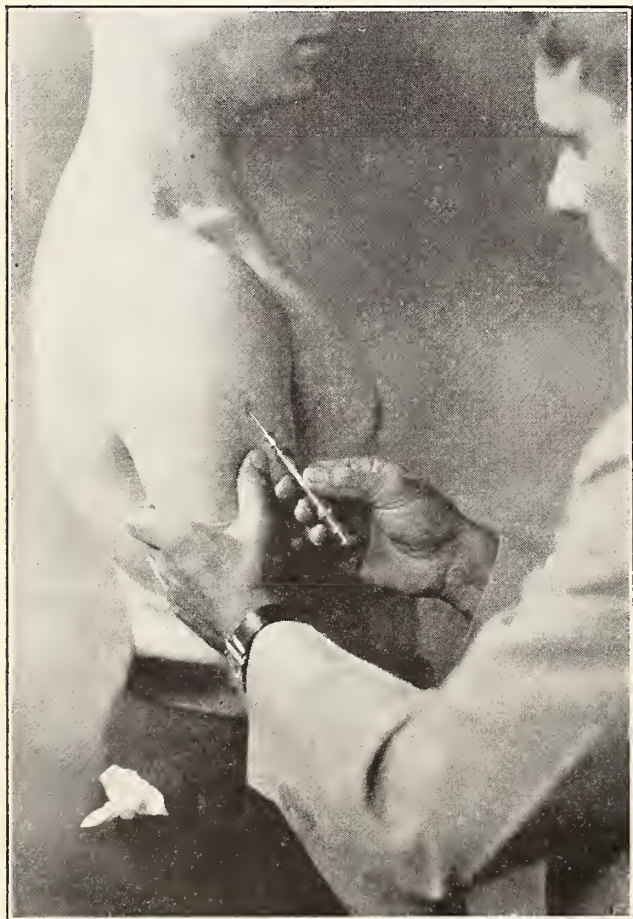


Figure II.

†From the Department of Medicine, School of Medicine, Tulane University, and the Charity Hospital of Louisiana, New Orleans.

pulse rate at no time was unduly rapid. On the twelfth of the month he developed auricular fibrillation which was persistent until he was digitalized. On the twenty-seventh he had a slight elevation of temperature which persisted for a few days as a result of suppuration of the glands of the neck. During the course of the initial fever the patient was more or less irrational and extremely toxic. Forty-eight hours after admission the ulceronecrotic lesion had affected also the right tonsil and there was a small area on the uvula. The buccal mucosa membrane was never involved. On the tenth he was given mild stimulating doses of roentgen ray over the flat bones.

The first injection of nucleotide, 0.7 gram, was given intravenously diluted with 150 c.c. of normal saline the morning of the fourth day after admission; 0.7 gram was given intra-muscularly about six hours later. The same amount, 0.7 gram, was given intramuscularly twice a day for the next two days.

The glands of the neck were incised four days after admission and cultures from this showed no growth. A deep abscess developed in the buttocks which was opened and drained on the twenty-fourth.

LABORATORY REPORTS

Blood							
	8-10-32	8-11-32	8-13-32	8-14-32	8-15-32	8-16-32	8-17-32
RBC			3,330,000				
WBC	900	850	2,270	5,170	11,800	16,400	16,450
SM	84	90	39	13	4	3	7
LM	12	10	5	0	1	0	0
E	0	0	1	1	0	0	0
B	0	0	0	0	0	0	0
N	4	1	36	56	61	69	61
Myeloblasts			2	4	6	2	2
Myelocytes			15	20	11	12	15
Metamyelocytes			5	6	17	14	15

	8-18-32	8-19-32	8-20-32	8-22-32	8-23-32	8-26-32	8-31-32
	RBC 3,029,000						
WBC	15,250	12,450	10,900	7,900	7,450	5,800	5,700
SM	2	9	5	10	12	15	15
LM	0	0	0	0	0	3	4
E	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0
N	77	78	83	85	83	78	81
Hg					60%		
Myeloblasts	2	3	1	0	0	0	0
Myelocytes	9	5	6	4	4	3	0
Metamyelocytes	10	5	5	1	0	1	0
Wassermann				negative.	Blood cultures		
					showed no growth.		

COMMENT

Hematological improvement was rather early in this case which suggests two questions: What influence did the roentgen ray therapy have? Did improvement take place before the medication was effective?

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LAKE CHARLES MEETING

Lake Charles is preparing in a very orderly manner to entertain the Louisiana State Medical Association. The profession and people of Lake Charles feel that it is a distinct honor to have the opportunity of entertaining such a scientific body. They are preparing to entertain the visitors extensively in order to make for them a very pleasurable and enjoyable vacation. Part of the entertainment will be

golf at any hour, Dr. G. C. McKinney, Chairman. A joint barbecue, Louisiana State Medical Association, and Ladies' Auxiliary will be held at the beautiful home of the Lake Charles Country Club, located on Lake Prien and Calcasieu river, not only giving a beautiful view of the lake, and river, but also some of the oil fields adjacent.

The Charleston Hotel has been chosen as registration headquarters and for the scientific and commercial exhibits. The luncheons will be held at the Majestic Hotel and St. Patrick's Sanitarium. The hotel committee has secured rooms. Dr. J. A. Crawford, Chairman, strongly urges that reservation be made at the earliest possible date. The Ladies' Auxiliary is completing an attractive program and are very anxious to have the ladies as their guests.

The following are the heads in charge of committees:

Arrangements: Dr. R. Gordon Holcombe.

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Entertainment: Dr. Wm. P. Bordelon.

Hotel rates: Majestic \$1.50 to \$3.50; Charleston \$2.00 to \$4.00; Rigmalden \$1.00 to \$1.50; Cherokee \$1 to \$1.50.

T. H. Watkins, Chairman of Publicity.

THE PROGNOSIS IN HEART DISEASE

There exists among the laity very generally the opinion that any disturbance of the heart, no matter of what type, is of ill prognostic significance. No matter what the character of the cardiac disturbance is, invariably when told that the heart is diseased they become worried, upset, and generally disturbed, frequently becoming cardiac neurasthenics. The doctor has learned this, often to his sorrow, and is wont to give a relatively cheerful prognosis in the majority of instances. Occasionally, however,

a pessimistic expression of opinion is occasionally given. This is unfortunate, because, as Rudolf* writes, "A gloomy view may precipitate heart failure." After all, many of the cardiac disturbances to which man is heir are often of no particular import. Extrasystoles, in the absence of other signs of heart disease, mean but little. Probably this irregularity produces the most common subjective symptoms referable to the heart. Sinus arrhythmia may produce symptoms noted by the patient, but again the condition has no significance. Even such conditions as auricular fibrillation, particularly in the older individuals, who are the subjects of arteriosclerotic heart disease, may exist for years without cardiac failure. Heart block and flutter are conditions of greater seriousness, but they are unusual and rare as compared with the first three types of arrhythmias just mentioned.

When the acute organic heart diseases are considered, a hopeful outlook is present in early syphilitic heart disease, within this limitation that it must be discovered early and that active treatment must be most thorough. Subacute bacterial endocarditis and rheumatic fever are types of acute cardiac infection in which necessarily the prognosis is extremely grave. With chronic disease of the heart, certainly it is unwise to express a definite opinion when the patient is first seen. Patients with rheumatic heart disease with mitral stenosis at times may go ahead and with proper care live a normal span of life, although this is exceptional. The syphilitic heart denotes, if failure has occurred, a seriousness which could only warrant a gloomy expression of opinion. In old people, the victims of arteriosclerotic heart disease, the duration of life is sometimes unbelievably prolonged, even in the presence of auricular fibrillation and loud systolic murmurs. Incidentally, the systolic murmur has apparently little prognostic value, whereas the diastolic murmur is invariably indicative of organic valvular disease and is prognostically of bad portent.

Angina pectoris may occur in only one attack or there may be attacks only at long intervals. Pain is a protective sign and sometimes warns

the patient and physician to limit stress and strain on a heart which may survive for years after the first attack. The patient with a low blood pressure is in a much more serious condition than he with high pressure. Coronary occlusion is increasingly common. It is not unusual for an individual to have one or two attacks, and then to have a collateral circulation established which to all intents and purposes, is sufficient to maintain cardiac circulation for years.

When all the various features that are responsible for heart symptoms and diseases are taken into consideration, and when the frequency of occurrence of comparatively mild subjective symptoms directed to the precordium are borne in mind, it behooves us to be guarded in our diagnosis, to be careful in our prognosis, and to trust that a favorable outcome will occur in these conditions in which the outlook is generally considered to be most gloomy.

AGAIN, MEDICAL ECONOMICS

The problems of medical economics are varied and obscured with many ramifications. At the present time there is much discussion about the future of medical practice and about the report of the Committee on the Costs of Medical Care. This particular phase of the economics of medicine is a broad and unsolved enigma, which it will be impossible at the present time to give answer. There is, however, another problem, possibly less important for the future but very alive at the present day, and that is the question of the reduction of the dues in the various types of medical organizations that exist locally and nationally. Many of the national organizations have cut their yearly dues, and here and there throughout the country there have been reductions as well in the State and County yearly dues. It is a perfectly natural tendency to cut expenses wherever possible. That they can be cut is undoubted, but a word of warning should be uttered in reference to too deep slashes in the yearly budget of the organizations representing the medical profession in an every-day contact with the public and with the individual members of the profession. Most Parish and State Societies have very definite purposes to which their funds are devoted.

*Rudolf, R. D.: Canadian Medical Association Journal, 28:35, 1933.

These purposes are of benefit undoubtedly to the profession as a whole. If budgets are cut too deeply then it will be impossible to carry out all that should be done and can be done to benefit the whole of organized medicine in a community. Drastic cuts will undoubtedly lead

to direct and indirect harm, which may leave a lasting impression on the medical profession particularly at this time when it is essential that organized medicine should be up and doing and constantly on the alert to guard their rights and privileges.

HOSPITAL STAFF TRANSACTIONS

STAFF MEETING OF THE BAPTIST HOSPITAL

The first meeting of the year of the Clinical Staff of the Baptist Hospital was held Tuesday, January 27, 1933, at 8:00 P. M., at which time the following recently elected officers were installed: Dr. H. W. E. Walther, chairman; Dr. J. P. Wahl, vice-chairman; Dr. E. H. Lawson, secretary, and Dr. A. M. Caine, treasurer.

Dr. Oscar W. Bethea presented the data covering thirty cases of epidemic influenza among the student nurses at the Baptist Hospital during the month of December. His conclusions were that the short period of fever and of absence from duty was due to prompt attention and complete control, and that while this group was small, the results have seemed to indicate that sometimes there is no necessity for extensive and varied medication. Discussions followed by Dr. Allan Eustis and Dr. M. W. Miller.

Dr. R. M. Willoughby presented a case of sarcoma of the prostate. He considered this case worthy of reporting for two reasons. First, because of its comparative rarity, and second, because of the disparity of opinion among men of wide experience in pathology relative to the benign or malignant character of such tumors. In a discussion of the paper, Dr. E. H. Lawson presented lantern slides illustrating the lesion as well as slides illustrating typical chronic inflammatory prostatitis, hypertrophic prostatitis and round cell sarcoma infiltrating skeletal muscle. In a discussion of the same paper, Dr. Von Haam brought out another group of sarcomas of the prostate: rhabdomyosarcoma, which Dr. Lawson had not discussed.

Dr. Julian Lombard presented some cases of unusual complications following injection treatment for hemorrhoids. He concluded, that in view of the long treatment necessary and the unusual complications which follow the injection treatment, this is not the best method to employ for the cure of hemorrhoids. Dr. T. B. Sellers, in discussing these cases, was of the opinion that these complications were due to faulty judgment on the part of the operator in selecting for injection, cases in which this type of treatment was contraindicated and not to the procedure itself. Dr. Maurice Lescale also pointed out some interesting cases to illus-

trate the incorrect use of the injection treatment for hemorrhoids.

Following this, a brief discussion of the deaths of the month was held.

STAFF MEETING OF HOTEL DIEU

The first monthly meeting of Hotel Dieu Staff under the 1933 administration, was held January 16, 1933, at eight o'clock P. M. Dr. P. L. Thibaut, president, presided, with Dr. Ruth Aleman, secretary, at the desk.

The Scientific program comprised the following:

Dr. M. F. Meyer presented a paper on "Epistaxis" covering its causes, proximal and remote, diagnosis and treatment. He reported the case of a ten-year-old child who gave a history of persistent attacks of epistaxis which were relieved only temporarily by packs. The child ultimately expired, completely exsanguinated.

The important note is that blood picture on admission revealed lymphatic leukemia. The total white cell count was 94,500 with 90 per cent lymphocytes. The man who previously treated the child had overlooked the etiology because blood count was not made.

Another hemophiliac had a bad time with hemorrhage following tonsillectomy; this subsided within a week or ten days. Later the patient had a tooth extracted, followed by violent hemorrhages. Transfusion helped not at all. The only successful therapy was radium applied over the spleen and long bones. Again, two months ago, when he had an epistaxis, radium over the spleen stopped it entirely. He has been well ever since. This method seemed to do more good than anything else done for the man.

Dr. Val H. Fuchs: I have seen but one case of epistaxis nearly causing death. Some years ago, an elderly woman had an antrum punctured at a clinic; it bled profusely, but was stopped, and she was allowed to go home. One of her teeth had been giving trouble. This tooth, the second bicuspid, showed an abscess apparently on the floor of the antrum. It was decided that the entire hemorrhage came from the nutrient artery of that tooth which had become eroded and was bleeding into the antrum. A dentist extracted the tooth and packed the fossa, and she had no further trouble.

Dr. Maurice M. Couret then presented a case of "Amebiasis with Perforation of the Colon—Autopsied."

The intestines were found studded with ulcers of two different types: one the punctured, undermined amebic ulcer—the other the funnel-shaped, superficial ulcer of bacillary dysentery. The amebae had also gotten into the liver, producing infarcts and necrosis.

Dr. Couret described the differentiating characteristics of amebic and of bacillary dysentery. He believes the colon perforation was due to bacillary dysentery and not to ameba. It is difficult to say which caused the first illness. Slides were exhibited, showing: (a) The difference between ulcers of amebic and of bacillary dysentery; (b) Section of the liver lesion.

Dr. Louis Levy: The case discussed by Dr. Couret was sent to me by Dr. Mattes, who diagnosed it as perforated colonic ulcer. Emetin was administered to no avail. A complete course of anayodin seemed to help her; she showed signs of walling off this ruptured ulcer. We were on the quiver for abscess of the liver. She ran a typical septic temperature. I think that in time that area would have sloughed and formed a large abscess such as Dr. Couret described. Her condition was progressive rather than retrogressive. The patient died suddenly. She seemed to be doing well when I made rounds about one hour previous to her death.

Dr. A. Mattes discussed the case from a urological standpoint.

Dr. A. L. Levin: The most valuable drug to destroy vegetative *Entamoeba histolytica* which might be present in the tissues or in the blood stream is emetin.

Dr. J. A. Danna discussed a case of colonic perforation following bacillary dysentery.

Executive session followed, and the meeting adjourned at 9:45 P. M.

TOURO INFIRMARY STAFF MEETING

The regular monthly meeting of the Medical Staff of Touro Infirmary was called to order by the new Chairman, Dr. I. I. Lemann.

Dr. Efron demonstrated a colored female who had been under his observation since October, 1932, for an allergy to cold. While this was considered a rather uncommon type of allergy, such conditions do occur. This patient had marked swelling of the hands with erythema, itching, and burning when they were exposed to cold. The reaction was produced promptly by allowing the patient to hold a piece of ice in her hand. Physiotherapy was used in this case, with a gradual increase of the amount of cold to which the patient was subjected, until at the present the patient is no longer sensitive. Just how long such a desensitization will exist could not be definitely stated.

A second case was discussed by Dr. Efron to illustrate the confusion that might exist between military tuberculosis and asthma in a child. The child in question, seven years of age, was sensitive to house dust and ragweed. A roentgenogram of the lung fields had been diagnosed as military tuberculosis of both lungs. Four tuberculin tests were negative, as were also the sputum examinations. There was remarkable clearing of the chest condition following treatment for the asthma. The cases were discussed by Drs. Heninger, Holbrook, Copland, and Roddick. In closing, Dr. Efron stated that the child discussed had had asthma of the bronchitis type, which often is associated with fever in children. Because of the multiplicity of possible changes in asthmatic children, the roentgenogram was stated to be absolutely unreliable in such cases.

Dr. Isidore Cohn first presented a case of carcinoma of the stomach. Roentgenograms had made a probable diagnosis of a movable foreign body within the stomach. At operation, however, a malignancy was found extensively involving the pars media. Resection was done. There was no evidence of metastases found at operation. The patient was shown and is now in absolutely good health.

Three cases of peritonitis were then discussed by Dr. Cohn. All three of these cases were treated by jejunostomy and drainage. They all went on to an uneventful recovery. In one case the cause of peritonitis was not determined. The presentation was discussed by Drs. Simon, Tyrone, Gessner, Rives, Maes, Roddick, and Browne.

Dr. Frank Cato presented a resumé and discussion of a case of spider bite. An eleven-year-old boy was bitten on the back by a spider while playing in a pile of old bricks. In about a half hour he began to have agonizing pains in his abdomen, and when seen two and one-half hours later was in extreme shock, temperature 97°, pulse 150. The abdomen presented a board-like rigidity, without tenderness. The total leukocyte count was 16,000, with 90 per cent neutrophils. Because of the extreme rigidity of the abdomen and leukocytosis, it was thought advisable to explore the abdomen. This was done and the abdomen was found to be entirely negative. Forty-eight hours after operation all the patient's symptoms subsided, and he went on to an uneventful recovery. One of the remarkable features of the case was the muscle hum present over the thorax, which masked all respiratory sounds. This was due to the extreme hypertonicity of the thoracic musculature. Dr. Cato gave a brief resumé of the reported cases in the literature.

Dr. Wirth stated that the first case reported in Louisiana was recorded in the June, 1930, issue of the New Orleans Medical and Surgical Journal by Dr. W. H. Browning of Shreveport. In this case

there had been marked anginoid pains over the precardium radiating down the left arm, with a marked elevation in blood pressure. The author of this report stated that he had learned of eleven similar cases which had occurred in the vicinity of Shreveport in the years 1920 to 1930, none of which had been reported. Dr. Rives spoke of the interesting occurrence of the muscle rumble over the thorax in Dr. Cato's case.

Following the scientific portion of the program two cases were presented for discussion by the Program Committee. The first case had been diagnosed as tuberculous retroperitoneal glands, with draining sinuses. At autopsy large retroperitoneal glands were found, with erosion of the two dorsal vertebrae and a huge retroperitoneal abscess. Histological examination of the tissues made the final etiological diagnosis of actinomycosis. The case was discussed by Drs. Hatch, Lanford, Lemann, and Rives.

The second case presented for discussion had been diagnosed clinically as lung abscess, acute pericarditis with effusion, and probable malignancy of the lung. Autopsy showed carcinoma of the upper right lung with metastases elsewhere. The case was discussed by Drs. Maes and Rives.

Following the meeting refreshments were served by the hospital.

Willard R. Wirth, M. D.

FIELD MEMORIAL HOSPITAL STAFF MEETING CENTREVILLE, MISS.

The regular monthly meeting of the Staff of the Field Memorial Hospital, Centreville, Mississippi, was held at 6:30 P. M., on Tuesday, February 7. After transaction of business and the reception of reports from committees the following clinical cases were presented:

1. Severe Skull Fracture—Dr. S. E. Field.
2. Chronic Pain in the Right Lower abdomen—Dr. C. E. Catchings.

The following interesting radiographs were presented: Renal calculi; Spontaneous Fracture of Femur Due to Metastatic Carcinoma; Complete Fracture of Head of Radius; Duodenal Ulcer; Carcinoma of Oesophagus; Empyema; Hypernephroma.

The meeting closed with an oyster supper.

S. E. Field.

KING'S DAUGHTERS HOSPITAL STAFF MEETING, GREENVILLE, MISS.

The regular monthly meeting of the King's Daughters' Hospital Staff, Greenville, was held on February 1. As has been the custom for the last two years, dinner was served at 7 P. M. and the meeting was called immediately afterwards. The meeting was called to order by Dr. J. G. Archer. Officers for the new year were elected as follows:

President, Dr. C. P. Thompson.

Vice-President, Dr. G. W. Eubanks.

Secretary, Dr. J. A. Beals.

Chairman, Section of Surgery, Dr. A. G. Payne.

Chairman, Section on Medicine, Dr. J. G. Archer.

Chairman, Section on Specialties, Dr. L. C. Davis.

The following resolutions deploring the death of Dr. Percy Toombs of Memphis, were passed:

RESOLUTIONS

The staff of the King's Daughters' Hospital of Greenville, Mississippi, deplores the death of Dr. Percy Toombs, of Memphis, Tenn.

Dr. Toombs was reared in Greenville and the first year of his practice was spent here, where he attained fame and honor. He was called to Memphis to occupy a professorship in the College of Physicians and Surgeons and later when the Medical Department of the University of Tennessee was transferred to Memphis, he was chosen professor of obstetrics in that institution, which chair he held at the time of his death. He was recognized throughout the country as an outstanding man in his profession.

This staff, this hospital, and this community were always glad to honor Dr. Toombs, and were proud to have him make the dedicatory address when our new hospital was opened in January, 1927.

We deplore the untimely death of this man who has spread so much luster over us, and feel deeply than we can express our loss of him as a friend, a co-worker and a teacher.

To his family we extend condolence, and assure them that we sorrow with them in their great loss.

A. G. Payne,

H. A. Gamble,

R. E. Wilson,

Committee.

The regular program of the evening proved most interesting.

Dr. George W. Eubanks reported two cases of peptic ulcer. One was in a man 57 years old, who had no previous symptoms and was stricken with a massive hemorrhage. The other was in a man of 62 years, who died with a malignant condition on whom a gastro-enterostomy had been done six years before.

Dr. Paul Gamble reported six cases of ureteral calculi stressing methods of diagnosis and treatment. The remarks were illustrated by showing the roentgenograms of the cases under discussion.

A most interesting feature of the program is the monthly health report which is given at each meeting by the county health officer, Dr. A. R. Perry.

John G. Archer.

Abstract: Acute Infectious Mononucleosis or Glandular Fever.—Dr. E. T. White, Greenville, Miss.

Acute infectious mononucleosis is an infectious disease developing, as a rule, without premonitory signs and characterized by slight redness of the throat, high fever, swelling and tenderness of the lymph glands of the neck. Children are the usual victims, but young adults are occasionally affected. Sometimes it occurs in epidemic form but most often as spasmodic cases. The etiology of the infection has not been determined. The leukocyte count varies from 12,000 to 20,000 per cu. mm. with 60 to 85 per cent lymphocytes which are usually young forms or lymphoblastic in type.

Case Report.—J. N., aged 23 years, occupation bank runner. Past history unimportant. The present illness began September 20, 1932, with a sore throat followed the next day with a fever of 101°F., a slight enlargement of the cervical lymph glands, and a clearing up of throat symptoms. The fever gradually increased for three days going as high as 103°F.

The laboratory findings were a negative blood Wassermann; no abnormal urine; normal hemoglobin and red blood cell count, but a leukocyte count varying from 10,400 on the second day of illness to 15,000 on the seventh day, after which it returned to 8,100 by the twelfth day. The differential count showed 44 per cent small lymphocytes at first examination and 78 per cent on the seventh day. On October 4, 1932, the tonsils were removed.

They showed some chronic inflammatory reaction but no increase in lymphoid tissue.

When this case was first seen acute lymphatic leukemia and Hodgkin's disease were considered as the probable diagnosis, but these were eliminated by the blood counts and sections of the lymph glands. Tuberculosis was also eliminated in this manner.

The final diagnosis was made on the seventh day of the illness after elimination of other diseases, and from the typical clinical symptoms and blood findings.

MATTY HERSEE HOSPITAL STAFF MEETING, MERIDIAN, MISS.

The staff of the Matty Hersee Hospital, Meridian, Miss., met in its first regular session, Friday, February 10, at 7 P. M.

Dr. H. S. Gully, Meridian, was unanimously elected chairman of the staff; Dr. J. T. Bailey, was elevated to vice-chairman, and Dr. C. J. Lewis, was elected secretary-treasurer. Members present voted to hold meetings at the Matty Hersee Hospital on the second Wednesday of each month.

The meeting was attended by twenty-nine physicians.

G. Lamar Arrington,
Superintendent.

MISSISSIPPI BAPTIST HOSPITAL STAFF MEETING, JACKSON, MISS.

The staff met February 7, in the dining room for dinner after which the visitors, of which there were six, were introduced. The minutes of the previous meeting were read and adopted. Dr. Lauch Hughes, a former member of the staff, was present at this meeting.

PROGRAM

1. Dr. Frank Hagaman reported a case as follows:

W. M., aged 73 years, had been having epigastric pain for a year with vomiting after meals especially if any activity was engaged in. An epigastric tumor was felt in the epigastrium which was well defined. The patient was well nourished. The roentgen ray findings were of a pyloric mass with a second degree obstruction. No free HCl, combined 40, no blood; Hb. 78 per cent; 4,000,000 RBC. An exploratory laparotomy was done and the mass was found and since the patient was doing so well on the table a gastric resection was done. Although there was no enlargement of the glands in the abdomen yet this was thought to be a polypoid carcinoma. Sections were made and the report showed polypoid growth with some wild cells at the base which resembled adeno-carcinoma with some round cell inflammatory infiltration. Patient made an uneventful recovery. The point stressed was the fact that one should not depend on the tactile and visual senses alone in these cases.

Discussion by Dr. A. E. Gordin. In following up the point stressed he also showed by illustration a case which at operation, nothing could be found of any significance except that the pyloric ring was a little thicker than normal and because nothing else could be found, a portion was removed and the report obtained was a malignancy, grade II, reported and the patient was afterward given the benefit of a gastric resection and the whole pylorus showed the same report.

2. Dr. Ainsworth reported a case as follows:

W. M., aged 79 years, on whom a prostatic expression was done and who did well till the fifth day when he became rather comatose and drowsy and developed an anuria. The usual procedures were resorted to, but to no avail. Salyrgan was given and no effect; spartein was given, one-half grain. An intravenous drip was attempted but the back pressure was so great that this failed. Late in the evening of the same day the patient suddenly aroused and began to pass urine and has been normal since.

Discussion by Mr. Palmerlee and Dr. Sheffield.

3. Dr. H. C. Sheffield reported an incident of his practice in the handling of an obstetrical case which was very amusing and to the point, and was very much enjoyed by the staff.

Dr. Hardy Hays was proposed for membership

on the staff of the Hospital and his name was referred to the membership committee.

Program committee for the next month is Drs. Dobson, Hooper, and S. H. McLean.

On March 20, talking pictures of the making and administration of insulin will be shown in the city, and Mr. Parmelee was delegated to notify the staff as to where and when it will be shown.

Lawrence Long,
Secretary.

NORTHEAST MISSISSIPPI HOSPITAL, BOONVILLE, STAFF MEETING

The Staff of the Northeast Mississippi Hospital met in regular session at 7:30 P. M., in the hospital lobby, on January 2. In the absence of the regular essayist, the meeting was declared open for round table discussion and several interesting talks and discussions were forthcoming on different medical and surgical conditions.

The next meeting of the staff was called to order on February 6, at 7:30 P. M., by Dr. W. H. Sutherland, president pro tem, and the clinical program was opened by Dr. W. W. Strange, who gave a very interesting discussion with case reports of a case of phlebitis following appendectomy and a case of non-union in a comminuted fracture of the first phalanx of the thumb. Both cases were liberally discussed.

R. B. Cunningham.

VICKSBURG INFIRMARY, STAFF MEETING

The regular monthly meeting of the Vicksburg Infirmary staff was called to order on February 1, by the president, Dr. Vincent Bonelli.

The minutes of the last meeting were read, approved and adopted. The staff report was rendered.

Motion made by Dr. Myers, that the president appoint a committee of three to draft resolutions on the death of Dr. M. H. Bell, copies to be sent to family, press and minutes. Motion carried. Drs. Myers, Smith and Herring were appointed.

The scientific portion of the meeting followed. This consisted of a dry clinic in which six cases of rather unusual chest conditions were presented. Discussion followed.

The meeting adjourned after a tasty course luncheon.

Nathan B. Lewis.

VICKSBURG SANITARIUM STAFF MEETING

The regular monthly meeting of the staff of the Vicksburg Sanitarium was held Friday, February 10, at 6:30 P. M. After the business of the staff and reports from the Records Department and Analysis of the work of the Hospital for the month, Dr. F. Michael Smith, Director, Warren County Health Department, presented a report of vital

statistics. Special case reports were presented as follows:

1. Carcinoma of the Breast.—Dr. A. Street.
2. Lympho-Sarcoma of Tonsil.—Dr. L. J. Clark.
3. Diffuse Endothelioma (Ewing Tumor) of Bone of Leg.—Dr. G. C. Jarratt.

Three-minute reports of the literature of the month were given as follows:

Dr. G. M. Street.—Relation of Placental Infarcts to Eclamptic Toxemia.

Dr. A. Street.—Non-filarial Elephantiasis.

Dr. L. S. Lippincott.—Function of the Adrenal Cortical Hormone.

Dr. J. A. K. Birchett, Jr.—Intestinal Obstruction, High and Low.

Dr. L. J. Clark.—Metaphen in the Treatment of Peptic Ulcer; Pigeon Breast.

Dr. R. A. Street, Jr.—Treatment of Rheumatic Heart Disease With Deep X-ray Therapy.

Selected radiographic studies were shown and discussed as follows: Exostosis of humerus; Sarcoma of leg; Arthritis of wrist; Arthritis of hip joint; Pulmonary tuberculosis (3 cases); Spontaneous pneumothorax; Cholelithiasis; Duodenal ulcer (3 cases); Diverticulosis of colon; Nephrolithiasis.

The meeting closed with a lunch. The next meeting of the staff will be held on Friday, March 10, at 6:30 P. M.

Abstract: Diffuse Endothelioma of Bone (Ewing Tumor of Bone of Leg.—Dr. G. C. Jarrett.

A patient white male child, aged 5 years, was first seen November 2, 1932. At that time the mother gave a history that two months previously the child had fallen on the leg and complained of some pain when walking for two or three days. There was slight swelling of middle third of left tibial region. Since that time, off and on, he had limped and complained of pain when walking but none when at rest. No fever since onset and no redness of overlying skin. Had tonsils and adenoids operation two weeks after onset of illness.

Physical Examination.—Well developed and nourished child, five years of age, not acutely ill. Temperature 99.4°F. The physical examination was negative except for the extremities.

Extremities, upper and right lower normal. Left lower: there was swelling of the middle third of left leg most marked medially, painful upon pressure, especially over anterior portion of bone of middle third, and pitting edema. No redness of skin. No fluctuation, no pain, no limitation of motion or swelling of knee and ankle. Less swelling on lateral posterior region of middle third of tibial region. Course and Treatment.—November 2, 1932, Roentgen ray revealed periostitis of inner and posterior aspects of left tibia. Urine normal; Wassermann, Kline and Young, and Kahn tests negative. Blood: Hemoglobin 82 per cent, erythro-

cytes 4,480,000, coagulation time $3\frac{1}{2}$ minutes, bleeding time $1\frac{1}{2}$ minutes, leukocytes 13,900, small lymphocytes 12 per cent, large lymphocytes 2 per cent, monocytes 1 per cent, polymorphonuclear neutrophils 84 per cent, eosinophils 1 per cent. No malaria. Mantoux, 1-1,000, negative after 72 hours.

The conditions considered with above findings were syphilitic periostitis, low grade infection or low grade osteomyelitis, and bone tumor.

No results seen in the appearance of the leg which was gradually increasing in size despite various therapeutic measures including deep roentgen ray. During this interval blood counts remained normal and no fever was encountered.

On December 26, 1932, child was admitted to hospital for purpose of exploring mass and obtaining tissue for microscopic examination. This was done with findings of a soft grayish gelatinous tumor mass in whole of left calf. Sections for microscopic examination revealed a diffuse endothelioma of bone (Ewing tumor). Roentgen ray examinations of pelvis, thorax, spine and skull revealed no involvement. Deep roentgen ray therapy then was instituted again.

Since leaving hospital this has been continued and at present has received 19 hours of roentgen ray therapy. Stopped on February 2, 1933, because of beginning dermatitis of skin. The incisions have healed nicely and size of leg has returned to normal; child now walking. There has been no evidence, as yet, of metastases to other parts.

FRENCH HOSPITAL

A regular monthly meeting of French Hospital was called to order Friday, February 10, 1933, Dr. H. B. Alsobrook presiding. The minutes of the last meeting were read and approved.

Dr. M. O. Miller then presented a report from the Membership Committee. This report consisted of the approval of Dr. M. Gardberg's application for membership to the staff and seven recommendations in regard to making staff meetings more interesting as it was the opinion of the committee that lack of attendance was due to uninteresting meetings.

The report was accepted and accordingly Article 9, of the By-Laws amended thus—the scientific program shall immediately follow the reading of the minutes instead of coming after New Business in the Order of Business.

The following motion was also made and passed on:—

Active members of French Hospital shall be required to belong to "organized medicine" (Orleans Parish Medical Society or La. State Medical Society); those members not so belonging to "organized medicine" must be listed with the Associate Staff.

Dr. Alsobrook then presented Dr. T. B. Ayo who

read a paper on "Posterior Presentation". Dr. Ayo stated that a diagnosis of posterior position can be arrived at in the following ways:— 1. Palpation of fontanels, 2. Palpation of one or both ears, 3. Palpation of sutures, 4. Palpation of cranial bones or 5. Palpation of parts of face. There is only a small per cent of error in the third and fourth means while the fifth gives an unmistakable diagnosis. The methods of procedure in delivery manual rotation of the head; manual rotation of head followed by the application of forceps; the single application of forceps with rotation and extraction; double application of forceps, the most successful and method of choice also known as Scanzoni method; and version and extraction.

This paper was discussed by Drs. Graffagnino, Menville and Gooch.

Dr. N. J. Tessitore next read a paper on the "Comparison of Labor in Young and Elderly Primipara." This paper was based on 238 cases reviewed at Charity Hospital. Of these, 208 cases were patients between the ages of 15 and 29, and 30 between 30 and 46. He stated that age is practically irrelevant to the prognosis of labor. A difficult labor is just a question of constitution. Dr. Tessitore's paper was discussed by Drs. Zander, Graffagnino, Socola and Baron.

A case of typhoid fever resulting in the patient's death was next opened to general discussion. There was some question as to the diagnosis of this case. Dr. Harris pointed out that this man had a high leukocyte count whereas in typhoid fever the toxic factor depresses the leukocytes. He suggested the possibility of dysentery.

There being no further business the meeting adjourned.

N. J. Tessitore, M. D.,
Secretary of Staff.

CHARITY HOSPITAL MEDICAL STAFF MEETING

The regular monthly meeting of the Medical Staff of Charity Hospital was called to order on Tuesday, February 21, 1933, at 8 P. M., by Dr. Giles, Chairman.

The first group of cases was presented by Dr. Signorelli. A ten-year-old male child was shown chiefly for the "human interest" of the case. This boy had been supporting seven members of his family by fishing. He was admitted with the possible diagnosis of malaria. The spleen was enlarged and hookworm ova were found in the feces. No malaria was found, though the boy had had quinine previous to his admission to the hospital. Dr. Signorelli then presented a very interesting and unusual condition of rumination occurring in a baby three or four months old. It had been observed that the child would regurgitate his food at intervals, and while some of it would dribble out of his

mouth, the child would swallow most of it. The possibility of hypertrophic pyloric stenosis was eliminated by the roentgenogram. Treatment consisted of slapping the child whenever this habit was indulged in. Insulin and forced feedings were used to correct the child's undernutrition.

Dr. Fred Fenno presented three cases of the so-called "myelitic syndrome". Three contrasting cases of myelitis were presented. One had been operated upon for a spinal cord tumor, only to find an inflammatory myelitis. The second case was one of a compression myelitis from a cord tumor.

Finally, a case of a rather rare post-influenzal myelitis which seems to be recovering.

These cases were ably discussed by Dr. Cazavette.

A case of an anemia of pregnancy was presented by Dr. Shushan. This interesting presentation was discussed by Drs. Jones and Levine.

Autopsy reports were then presented by Drs. Conelly and Von Haam. As usual, these were very interesting and instructive.

Willard R. Wirth, M. D.

TRANSACTIONS OF ORLEANS PARISH MEDICAL SOCIETY

CALENDAR

March 1—Clinico-Pathological Conference, Touro Infirmary, 10:30 A. M. to 11:30 A. M.

March 3—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

March 3—Physiology Seminar, Tulane Medical School, 5 P. M.

March 6—Eye, Ear, Nose and Throat Hospital Staff, 8 P. M.

March 8—Clinico-Pathological Conference, Touro Infirmary, 10:30 A. M. to 11:30 A. M.

March 8—Touro Infirmary Staff, 8 P. M.

March 10—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

March 10—Physiology Seminar, Tulane Medical School, 5 P. M.

March 10—French Hospital Staff, 8 P. M.

March 13—Joint Meeting of the Orleans Parish Medical Society and the New Orleans Gynecological and Obstetrical Society, 8 P. M.

March 15—Clinico-Pathological Conference, Touro Infirmary, 10:30 A. M. to 11:30 A. M.

March 15—Charity Hospital, Surgical Staff, 8 P. M.

March 16—Eye, Ear, Nose and Throat Club,

March 16—New Orleans Hospital Council, DePaul Sanitarium, 8 P. M.

March 17—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

March 17—I. C. R. R. Hospital Staff, 12 Noon.

March 17—Physiology Seminar, Tulane Medical School, 5 P. M.

March 17—Mercy Hospital Staff, 8 P. M.

March 20—Hotel Dieu Staff, 8 P. M.

March 21—Charity Hospital, Medical Staff, 8 P. M.

March 22—Clinico-Pathological Conference, Touro Infirmary, 10:30 A. M. to 11:30 A. M.

March 24—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

March 24—Physiology Seminar, Tulane Medical School, 5 P. M.

March 27—ORLEANS PARISH MEDICAL SOCIETY, 8 P. M.

March 28—Baptist Hospital Staff, 8 P. M.

March 29—Clinico-Pathological Conference, Touro Infirmary, 10:30 A. M. to 11:30 A. M.

March 31—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

March 31—Physiology Seminar, Tulane Medical School, 5 P. M.

During the month of February besides the regular meeting of the Board of Directors, the Society held one regular scientific meeting at which time the following program was presented:

Just an Appendix, by Dr. Isidore Cohn.

Mandibular Third Molar Infections and Complications, by Dr. Sidney L. Tiblier.

Discussed by Dr. James T. Nix.

Contact Dermatitis, by Dr. B. G. Efron.

Discussed by Dr. L. von Meysenbug.

Dr. J. A. Storck, proposed for Honorary Membership at the regular meeting of January 23, was elected an Honorary Member at this meeting.

The following resolution from the Committee on Abuse of Federal Hospitals, Dr. Emmett Irwin, Chairman, was read and adopted:

WHEREAS, it is a fact well known generally, and in the common professional experience of the Medical and Surgical practitioners of this state, that the Federal Government has entered into active competition with said practitioners in that it encourages veterans to receive treatment in the Government Hospitals for sickness and disabilities unconnected with service in the Army, Navy and Marine Corps, and

WHEREAS, recognizing that it is just and right that ex-service men are entitled to receive care at Government expense for illness or disabilities directly connected with, and incurred in line of duty, it is also true that when the Government enters into unfair and damaging competition with the

Medical Profession and Private Hospitals of the Country in soliciting and caring for ex-service men affected with ailments totally unrelated to the Government Service in war or peace, it perpetrates an injustice, and

WHEREAS, the Medical Profession, with philanthropic dedication to duty, is ever ready and prepared to answer the call of the Government in the time of need; administer to the wants of the poor and destitute of any community; and said profession feels that the present practice of the Government of treating veterans whose illnesses or disabilities are not connected with any service is discriminative, and damaging to the best interest of the profession and, as the competition of the Government has already become a menace to the livelihood of a large body of citizens who must obtain a living in a profession whose work is indissolubly associated with charity, and in its purposes is largely altruistic, recognizing these facts, the Orleans Parish Medical Society, of New Orleans, Louisiana, offers its vigorous protest against the United States Government entering into professional competition with the Medical and Surgical practitioners of the Nation, and this Society hereby

RESOLVES, that it will and does hereby solicit the active influence of the National Representatives and Senators of Louisiana in an effort to promote and pass legislation correcting this injustice and the evils above enumerated.

Ed. Leckert

Gilbert Anderson

Paul Lacroix

Hermann Gessner

Emmett Irwin, Chairman,

Committee on Federal Hospitals Abuse

Unanimously adopted by the Orleans Parish Medical Society at its meeting held February 13, 1933.

The following resolution was read and according to the By-Laws has to lay over until the next meeting of the Society:

In view of the thirty-three and one-third per cent reduction in dues of the Orleans Parish Medical Society for the year 1933, and on recommendation of the Treasurer's Report Committee, and with the approval of your Board of Directors, a resolution is herewith offered that the entire income from the Domicile Fund be allocated to Library maintenance.

Resolutions were adopted on the death of three of our Active Members as follows:

RESOLUTIONS ADOPTED BY THE ORLEANS PARISH MEDICAL SOCIETY, MONDAY, JANUARY 23, 1933

Dr. E. A. Rappannier was born in New Orleans in 1872 and died here October 9, 1932 after a lengthy illness. He was a graduate of the Tulane School of Medicine in 1894. Dr. Rappannier devoted

his life to the practice of medicine and like many a physician he made no distinction between rich and poor, it being notable that many of his patients were among the latter class. He treated many people without compensation in money.

In the death of Dr. Rappannier the medical profession and the Orleans Parish Medical Society has lost an esteemed and valued member.

A copy of this appreciation shall be sent to his widow and it shall be inscribed on the record of the Society.

Dr. Alfred A. Pray, lifelong resident of New Orleans, and a graduate in medicine of Tulane University, member of the Orleans Parish Medical Society, died at Touro Infirmary, Monday, November 7, 1932.

Dr. Pray was a very pleasant and unassuming man, who never took an active part in organized medicine, but devoted his entire time to the practice of his chosen profession. He was a member of several social organizations of this City, but was never married. He was a man of apparently independent thought, and never mingled freely with members of our profession, but those who knew him esteemed him very highly.

It is the sense of this Society that in the death of Dr. Pray the Society has lost a very much esteemed physician, and it is our desire that the members of his family shall have a copy of this appreciation, in order that they may know we deeply sympathize with them in the loss of their brother.

Dr. Henry Daspit, physician and teacher, died on December 19, 1932, aged forty-eight years. His death was due to pneumonia complicating an attack of influenza.

In the comparatively short period of his earthly existence, Dr. Daspit had earned an enviable position in the ranks of the medical profession by virtue of his outstanding accomplishments in the field of neurology and because of his unusual ability as an executive. It is fair to assume that had his life been prolonged his untiring energy, his intellectual attainments, his congeniality, and his aptness and skill in medical affairs would have earned him an even greater earthly reward. As a clinician Dr. Daspit had acquired a large medical practice because of his extensive knowledge of neurology and psychiatry, and because of his congeniality and sympathetic nature. He was even tempered and rational in his conception of medicine and was not influenced by temporary fads.

He was professor of neurology and psychiatry at Tulane University, dean of the post-graduate medical school, and neurological consultant of the U. S. Public Health Hospital; Illinois Central Hospital; Eye Ear, Nose and Throat Hospital; Touro Infirmary and the City Hospital for Mental Di-

seases. Aside from these he was a member of the advisory board of Flint-Goodridge Hospital, and he took an active part in the affairs of the American Hospital Association and Prison Reform Association. He was a member of the Trinity Episcopal Church, Masonic Order, Delta Kappa Epsilon Fraternity, Phi Chi Fraternity, the Boston, Louisiana and Round Table Clubs.

One may well say that Dr. Daspit's life was a full one, but despite the public activities with which he was concerned he found time to contribute richly to medical literature. In the discussion of medical subjects on the floor of the medical societies Dr. Daspit's statements on medical cases always created the impression of the soundness of his position, and his statements were always concise and positive.

He did not permit his professional obligations and duties to interfere with his friendships, and it can be truly said that he enjoyed the favor, esteem and friendship of people of all classes in the community.

He was never married but found sufficient love and tranquility in his domestic life beneath his roof in the society of his mother, who found great pride in the contemplation of the successes of her devoted son.

In the untimely and deplorable death of our illustrious colleague the medical profession has lost a member who was devoted to the interests of his city and state, whose invaluable advice will be sadly missed in the counsel of organizations to which he had so richly contributed.

A copy of this appreciation shall be sent to Mrs. Elizabeth W. Daspit, and shall also be placed on the record of this Society.

We regret to report the loss of another one of our Active Members, Dr. Geo. F. Cocker, who died Sunday, February 12, 1933.

The Secretary's office is continuing its work on Hospital Abuse.

Dr. Isidore Cohn and Colonel C. F. Craig addressed the Mid-South Post-Graduate Assembly at Memphis.

Dr. Roy B. Harrison, Secretary of the Louisiana State Board of Medical Examiners, discussed a paper on Reciprocity at the meeting of the Federation of State Board of Medical Examiners held in Chicago.

Drs. Emmett Irwin and Chas. J. Bloom attended the meeting of the Second District Medical Society at Vacherie, Louisiana, Thursday, February 16.

Dr. F. E. LeJeune discussed a paper at the meeting of the Southern Section of the Tri-Logical Society at Memphis, February 13.

Dr. J. H. Musser presented a paper before the American College of Physicians at Montreal and gave two clinics at the Royal Victoria Hospital the week of February 13.

Dr. Alton Ochsner will attend the meeting of the Pacific Coast Surgical Association. He will be the principal speaker at the Puget Sound Academy of Surgery in Seattle, March 4, and will give a paper and clinic before the Southeast Surgical Congress in Atlanta on March 8.

Dr. Arthur Vidrine, Superintendent of Charity Hospital and Dean of the Louisiana State University Medical Center, Dr. J. A. Danna and Dr. Urban Maes attended the meeting of the Council on Medical Education in Chicago.

TREASURER'S REPORT

ACTUAL BOOK BALANCE: 12/30/32.....	\$1,568.61
Receipts	3,323.05
	<hr/>
	\$4,891.66
January expenditures	3,583.74
	<hr/>
ACTUAL BOOK BALANCE: 1/31/33.....	\$1,307.92

LIBRARIAN'S REPORT

One hundred and ninety-two books have been added to the Library during January. Of these 29 were received by purchase, 78 by gifts, 15 from the New Orleans Medical and Surgical Journal and 70 by binding. New titles of recent date are listed below.

The reference work has been unusually heavy. Material has been collected on the following subjects:

- Lactrodectus mactens poisoning.
- Stippled red cells.
- Pneumothorax.
- Endometriosis.
- Empyema in infancy.
- Stippled basophilia.
- Innominate aneurysm.
- Therapeutic use of oils.
- Tumors of eyelids.
- Arsphenamines and their use.
- Types of apparatus for blood transfusion.
- Personal bibliography of J. N. Roussel.
- Physical therapy for children.
- Pyelitis in pregnancy.
- Cysts of liver.
- Relation of age to labor in primiparae.

Typhoid pyonephrosis.
 Blastomycosis of larynx.
 Traumatic appendicitis.
 Blastomycosis of larynx.
 Traumatic appendicitis.
 Hydrorrhea gravidarum.
 Heroin addiction and its treatment.
 History of gynecology.
 Technique of Rankin and Schoemaker in intestinal anastomosis.
 Vasodilators.

NEW BOOKS

Association of Life Insurance Presidents—Proceedings. 1932.
 Washington Institute of Medicine. v. 3 1932.
 Committee on Cost of Medical Care—Medical Care for American People. 1932.
 Committee on Cost of Medical Care—Final report on medical education. 1932.
 Practitioner's Library of Medicine and Surgery. v. 3 1932.
 National Board of Medical Examiners—Directory of Diplomates. 1932.
 Ophuels, William—Arteriosclerosis and Cardiovascular disease. 1921.
 Emge, L. A.—Cytological Study of Kidney Cell. 1921.
 Straub, Walter—Lane lecture on Experimental Pharmacology and Medicine. 1931.
 Magnus, Rudolf—Lane lecture on Experimental Pharmacology and Medicine. 1930.
 Small, L. F.—Chemistry of the Opium Alkaloids. 1932.

Mendel, L.—Vitamins. 1932.
 Williams, Pearce—Purchase of Medical Care. 1932.
 Conybeare, J. J.—Textbook of Medicine. 1932.
 Kaiser, A. D.—Children's Tonsils in or out. 1932.
 Matheson, Robert—Medical Entomology. 1932.
 Smith, D. T.—Oral Spirochetes. 1932.
 Hertzler, A. E.—Surgical Pathology of Female Generative Organs. 1932.
 Brooks, Harlow—Functional Disturbances of the Heart. 1932.
 Wagoner, George—Handbook of Experimental Pathology. 1932.
 Piette, E. C.—Pathology for Nurses. 1932.
 Rowe, A. W.—Differential Diagnosis of Endocrine Disorders. 1932.
 Bland, P. B.—Practical Obstetrics. 1932.
 Looney, W. W.—Anatomy of Brain and Spinal Cord. 1932.
 White, Priscilla—Diabetes in Childhood and Adolescence. 1932.
 Crow, H. W.—Handbook of Vaccine Treatment of Chronic Rheumatic Disease. 1932.
 Miller, C. J.—Clinical Gynecology. 1932.
 American College of Surgeons—Yearbook. 1932.
 International Congress of Military Medicine and Pharmacy—Report. 1931.
 American Pediatric Society—Transactions. 1932.
 U. S. —Navy—Report of Surgeon-General. 1932.
 U. S.—Public Health Department—Report of Surgeon-General. 1932.

Frederick L. Fenno, M. D.,

Secretary.

LOUISIANA STATE MEDICAL SOCIETY NEWS

LETTERS TO PARISH AND DISTRICT SECRETARIES

Dear Doctor:

Supplementing our letter of January 9, offering constructive suggestions for organized medicine for 1933, I wish to submit some very valuable data. This information should be of interest to those members of our State Society and also an inducement to those who are not yet members to join the organization. This will show the principal distribution made of the annual dues of the Louisiana State Medical Society, and also the benefits of same.

1. The New Orleans Medical and Surgical Journal, owned by the Louisiana State Medical Society, with a yearly subscription price of \$3.00, is furnished to all members of the State Society free of cost. The cost is borne by the State Society through a per capita assessment from the General Fund.

2. Protection from alleged malpractice suits, no practicing physician can afford to be without pro-

tection of this character. The Medical Defense Fund is being built up from \$6,000 to \$10,000, by a fifty cents per capita until completed. (Since 1914 the Medical Defense Committee of the State Society has successfully defended all malpractice suits.)

3. Participation if desired in group indemnity insurance. Thirty per cent is saved by individual doctors belonging to this group. (Insurance which will pay liability when judgment is against the physician.)

4. Participation in group life insurance, with a saving equal to fifty per cent of any regular premium.

5. Through the co-operation of our Committee on Public Policy and Legislation and the Louisiana State Board of Medical Examiners, protection is assured against the invasion of cults and other illegal practitioners. (The State of Louisiana is unique in this regard.) The expenses for the work of the Committee on Public Policy and Legislation

average about fifty cents per capita from the General Fund.

6. Membership in the Parish Society and State Society qualifies you as a member of the Southern Medical and American Medical Associations.

7. Fifty cents per capita is paid for the entertainment at annual meetings. This does not include the expenses for medical reporting or other expenses allotted for the annual meetings, which are approximately fifty cents per capita.

8. Approximately twenty-five cents per capita is paid to the Orleans Parish Medical Society for office pro-rata.

9. The preparation of the History of the Louisiana State Medical Society, which is not yet completed. Considerable money has already been invested, and the future budgets will have to be arranged for its completion.

The above itemizations do not take into consideration the routine office expenses and salaries.

While these benefits are more or less economic in value to you, they should not be comparable in dollars and cents to the immense evaluation accrued from our scientific programs, to the strengthening of our organization by advancing and conserving the interests of its members, improving public health and sanitation, and to the efforts to support and aid medical education.

Trusting this information will be of some value, I am,

Yours very truly,

P. T. Talbot, M. D.,

Secretary-Treasurer.

Dear Doctor:

The Budget and Finance Committee of the Louisiana State Medical Society has given due and careful consideration to the financial status of the State Society. We are cognizant of the present financial conditions throughout the State, and realize the necessity and equity for some reduction of dues due to these conditions.

We request your organization to withhold the instructing of your delegates to the next regular meeting of the State Medical Society at Lake Charles to vote for a reduction of dues to any specific amount, as we are aware that it would be impossible for the Louisiana State Medical Society to operate on a \$4.00 per capita basis.

The method of disbursing the \$7.00 dues was thoroughly explained to you in a letter from the Secretary-Treasurer under date of January 26, 1933, which has the endorsement of the Budget and Finance Committee.

Hoping that you will co-operate for the betterment of the Society, we are,

Yours very truly,

Committee on Budget and Finance

E. L. Leckert, M. D.

Chairman.

THE SHREVEPORT MEDICAL SOCIETY

The Shreveport Medical Society held its first 1933 meeting on January 3, and the following officers for the year were installed: Dr. Frank Walke, President; Dr. I. B. Moise, First Vice-President; Dr. D. R. McIntyre, Treasurer; Dr. J. E. Knighton, Jr., Secretary. The following committees were appointed by the President. Program Committee, Dr. W. H. Browning, Chairman; Dr. R. C. Young, Dr. P. D. Abramson, Dr. W. L. Atkins, Dr. P. Gilmer. Entertainment Committee, Dr. J. M. Gorton, Chairman; Dr. H. J. Quinn, Dr. W. P. Lamberth, Dr. T. J. Fleming, Dr. L. T. Baker. Library Committee, Dr. J. M. Bodenheimer, Chairman; Dr. J. B. Younger, Dr. Chas. Gowen. Ethics Committee, Dr. T. P. Lloyd, Chairman; Dr. S. C. Barrow, Dr. B. C. Garrett, Dr. J. E. Knighton, Dr. L. H. Pirkle. Public Health and Legislation, Dr. W. P. Butler, Chairman; Dr. P. T. Alexander, Dr. F. S. Furman, Dr. G. P. Quinn, Dr. T. B. Tooke, Memorial Committee, Dr. A. A. Herold, Chairman; Dr. S. W. Boyce, Dr. J. A. Hendrick. Radio Committee, Dr. W. B. Heidorn, Chairman; Dr. W. R. Harwell, Dr. M. D. Hargrove. Attendance Committee, Dr. C. Erickson, Chairman; Dr. Geo. Garrett, Dr. F. A. Buvens, Dr. M. S. Ledoux, Dr. R. H. Riggs. Finance Committee, Dr. D. R. McIntyre, Chairman; Dr. L. W. Gorton, Dr. P. C. Worley, Dr. W. J. Norfleet, Dr. C. S. Hamner.

The program committee promises to have some outstanding visitor to offer a paper at nearly all future meetings this year.

The regular meeting date for the Shreveport Medical Society is the first Tuesday night of every month at 8 P. M. The meeting place is the Caddo Court House. All visitors and neighboring doctors are always welcome.

MADISON, EAST CARROLL AND WEST CARROLL TRI-PARISH MEDICAL SOCIETY

The Tri-Parish Medical Society was recently organized at Lake Providence, Louisiana, with the following physicians as charter members:

Dr. B. R. Burgoyne, Lake Providence.
Dr. G. S. Hopkins, Lake Providence.
Dr. J. Preston Davis, Lake Providence.
Dr. W. K. Evans, Lake Providence.
Dr. W. H. Hamley, Lake Providence.
Dr. G. D. Williams, Lake Providence.
Dr. B. C. Abernathy, Soudheimer.
Dr. E. O. Edgerton, Tallulah.
Dr. G. W. Gaines, Tallulah.
Dr. E. S. Freeman, Tallulah.
Dr. A. T. Palmer, Tallulah.
Dr. L. Stevens, Tallulah.
Dr. H. C. Sevier, Tallulah.
Dr. B. T. Ferguson, Waverly.
Dr. B. L. Bailey, Epps.
Dr. E. D. Butler, Oak Grove.
Dr. W. McG. Dollerhide, Oak Grove.

Dr. L. A. Masterson, Oak Grove.

The officers of the Society are: Dr. W. H. Hamley, President; Dr. G. W. Gaines, First Vice-President; Dr. W. McG. Dollerhide, Second Vice-President; Dr. G. D. Williams, Secretary-Treasurer.

The last regular meeting was held at the Community Club in Lake Providence on Tuesday, February 7. At this meeting the Constitution and By-Laws were adopted and application was made to the State Society for the charter.

The scientific program consisted of a paper read by Dr. E. D. Butler of Oak Grove, on "Tularemia". This paper was discussed by Doctors Dollerhide, Gaines, Edgerton, Burgoyne, Davis, Bailey, and Abernathy. Dr. G. S. Hopkins also read a paper on "Right Sided Abdominal Pains in the Female", which was discussed by Doctors Davis, Burgoyne, Hamley, Dollerhide, and Ferguson.

The regular meetings are held on the first Tuesdays of each month. Up to date all of the meetings have been well attended and a great deal of enthusiasm has been shown by the members. The next regular meeting of the Society will be held in Tallulah, Tuesday, March 7th, 1933.

G. Douglas Williams, M. D.,
Secretary.

EAST AND WEST FELICIANA BI-PARISH MEDICAL SOCIETY

The Bi-Parish Medical Society met in the East Louisiana State Hospital as the guests of Dr. Glenn J. Smith and Staff. There were about 50 physicians and guests present. After a most elaborate and enjoyable banquet in the dining room of the hospital, the Society was called to order by the President. Communications and minutes were read. On motion our delegate, Dr. C. S. Miller, was instructed to use his discretion and vote as he thought wise in the House of Delegates relative to the reduction of State Society dues.

The State Secretary was instructed to notify the different Parish Tax Collectors that the Assistant Attorney General had rendered an opinion that physicians were exempt from a license tax. Scientific Program. Dr. Tom Spec Jones of Baton Rouge read a learned and instructive paper on "Cancer". Paper was freely and favorably discussed by physicians present. By resolution it was ordered that our Society request the publication of Dr. Jones' paper in the New Orleans Medical and Surgical Journal. Dr. W. C. Norris of Clinton read an interesting and instructive paper on "Some Notes on Dental Focal Infections". The paper was freely discussed, and a vote of thanks extended to Dr. Norris for the presentation of his paper.

Dr. P. T. Talbot, our State Secretary-Treasurer, and our guest, gave an instructive talk to our Society. By motion Drs. Talbot, Eidson, McCaa and

Sarter were elected honorary members of our Society. Society adjourned to meet in Jackson, the first Wednesday in April, 7:30 P. M.

E. M. Toler, Secretary.

E. M. Robards, President.

TANGIPAHOA PARISH MEDICAL SOCIETY

A regular meeting of the Tangipahoa Parish Medical Society was held January 26, 1933, at the City Hall, Hammond, Louisiana.

Dr. J. N. Roussel, Professor of Dermatology, L. S. U. Medical Center, gave a practical discussion of skin diseases, followed by a discussion by Dr. J. K. Howles, Assistant Professor of Dermatology, L. S. U.

THIRD DISTRICT MEDICAL SOCIETY

The Third District Medical Society held a meeting in Lafayette, at the Terrace Hotel, on January 12, at 7:00 P. M. Drs. Burns, DeLahoussaye and Eshleman, all of New Orleans, gave interesting papers.

SIXTH DISTRICT MEDICAL SOCIETY

The Sixth District Medical Society will meet in Baton Rouge at the Baton Rouge General Hospital on Thursday, March 30, 1933, at 9:30 A. M.

The President of the Society, Dr. Lester J. Williams, announces the following program:

The Future of Organized Medicine, Dr. Roy B. Harrison, President La. State Medical Society.

The Advantages of Affiliation with Medical Societies, Dr. C. A. Weiss, President-Elect La. State Medical Society.

Superficial Radiation Therapy, Dr. S. C. Barrow, Shreveport, Louisiana.

Recent Advances in the study of Diabetes Mellitus, Dr. A. A. Herold, Shreveport, Louisiana.

Peritonad Adhesions, Dr. J. Q. Graves, Monroe, Louisiana.

A paper will also be read by Dr. Walter E. the Sixth District Medical Society held at Bogalusa, Sistrunk, Dallas, Texas.

ASCENSION PARISH MEDICAL SOCIETY

The Semi-Annual Meeting of the Ascension Parish Medical Society was held in the Elks Home, Donaldsonville, La., Dr. H. A. Folse, of Donaldsonville, presiding.

The election of officers for the coming year was held and the following were chosen. Dr. D. C. Brumfield, Darrow; Vice-president, Dr. T. H. Han-T. H. Hanson, Donaldsonville, Vice-President; Dr. Myer Epstein of Gonzales, Secretary-Treasurer. The Delegates to the State Medical Convention are: Dr. D. T. Martin of Donaldsonville, and Dr. H. A. Folse of the same city, Alternate.

The meeting of the Society will be held in June.

1933 PARISH OFFICERS

The following Parish Medical Societies have elected officers for 1933:

ACADIA PARISH: President, Dr. H. L. Gardiner, Crowley; Vice-President, Dr. J. P. Parrott, Church Point; Secretary-Treasurer, Dr. A. B. Cross, Crowley.

ASCENSION PARISH: President, Dr. D. C. Brumfield of Darrow was elected President; Dr. son, Donaldsonville; Secretary-Treasurer, Dr. Myer Epstein, Gonzales.

BEAUREGARD PARISH: President, Dr. T. A. Guillory, Merryville; Vice-President, Dr. John D. Frazar, DeRidder; Secretary-Treasurer, Dr. R. L. Love, DeRidder; Delegate, Dr. S. T. Roberts, DeRidder; Alternate, Dr. R. L. Love, DeRidder.

SHREVEPORT PARISH (CADDO): President, Dr. F. H. Walke, Shreveport; First Vice-President, Dr. A. B. Moise, Shreveport; Second Vice-President, Dr. W. S. Kerlin, Shreveport; Secretary, Dr. J. E. Knighton, Jr., Shreveport; Treasurer, Dr. D. R. McIntyre, Shreveport; Delegates, Drs. W. P. Butler, W. S. Kerlin, W. B. Heidorn, P. R. Gilmer, W. J. Norfleet, B. C. Garrett.

CLAIBORNE PARISH: President, Dr. E. B. Middleton, Homer; Vice-President, Dr. M. J. Rivenbark, Homer; Secretary-Treasurer, Dr. H. R. Marlatt, Homer; Delegate, Dr. J. W. Featherstone, Homer; Alternate, Dr. H. R. Marlatt, Homer.

LAFAYETTE PARISH: President, Dr. C. E. Hamilton, Lafayette; Vice-President, Dr. R. S. Hernandez, Lafayette; Secretary-Treasurer, Dr. L. B. Long, Lafayette.

MOREHOUSE PARISH: President, Dr. W. A. Rogers, Bastrop; Vice-President, Dr. S. D. Graves, Bastrop; Secretary-Treasurer, Dr. L. E. Larche, Bastrop; Delegate, Dr. M. W. Owen, Bonita; Alternate, Dr. R. B. Leavell, Bastrop.

OUACHITA PARISH: President, Dr. J. W. Murphy, Monroe; Vice-President, Dr. I. J. Wolff, Monroe; Secretary-Treasurer, Dr. D. M. Moore, Monroe; Delegates, Drs. F. C. Bennett and H. E. Guerriero, both of Monroe; Alternates, Drs. W. M. Hunter and A. E. Fisher, both from Monroe.

RAPIDES PARISH: President, Dr. S. J. Phillips, Alexandria; First Vice-President, Dr. E. Weiner, Alexandria; Second Vice-President, Dr. B. H. Texada, Alexandria; Secretary-Treasurer, Dr. H. O. Barker, Alexandria; Board of Censors, Dr. R. E. McGill, Alexandria; Delegates, Dr. F. V. Gremillion, Alexandria; term of office three years. Dr. E. DeNux, Echo, one year; Dr. King Rand, Alexandria, two years.

SABINE PARISH: President, Dr. R. B. Stille, Many; Vice-President, Dr. W. D. Lester, Many; Secretary-Treasurer, Dr. S. F. Fraser, Many; Delegate, Dr. J. K. Phares, Many; Alternate, Dr. W. G. Allen, Converse.

TERREBONNE PARISH: President, Dr. R. W. Collins, Houma; Vice-President, Dr. J. W. Duval, Houma; Secretary-Treasurer, Dr. S. F. Landry, Houma; Delegate, Dr. J. B. Duval, Houma; Alternate, Dr. R. W. Collins, Houma.

TRI-PARISH MEDICAL SOCIETY (EAST CARROLL, MADISON, WEST CARROLL): President, Dr. W. H. Hamley, Lake Providence; First Vice-President, Dr. G. W. Gaines, Tallulah; Second Vice-President, Dr. W. McG. Dollerhide, Oak Grove; Secretary-Treasurer, Dr. G. D. Williams, Lake Providence.

WEBSTER PARISH: President, Dr. W. C. Sumner, Minden; Vice-President, Dr. C. M. Baker, Minden; Secretary-Treasurer, Dr. Wilkins McDade, Minden; Delegate, Dr. C. M. Baker, Minden; Alternate, Dr. Wilkins McDade, Minden.

INFECTIOUS DISEASES IN LOUISIANA

Dr. J. A. O'Hara, President of the Louisiana State Board of Health, in collaboration with the Treasury Department of the United States Public Health Service, has issued morbidity weekly reports, which briefly abstracted contain the following information. For the week ending January 21, a large number of cases of influenza was still being reported, there occurring 260 in this week. There were also 38 cases of pneumonia reported, a drop of nearly 50 per cent in both instances as contrasted with the previous week. There was also reported 40 cases of syphilis, 25 of gonorrhea, 20 of diphtheria, 20 of pulmonary tuberculosis, 19 of cancer, and 13 of whooping cough. During this week there were also reported 1 case of smallpox, 1 of typhus fever, and 1 of hydrophobia. For the week ending January 28, evidence that the influenza epidemic had subsided was very definite, as there were only 124 cases reported and most of these were delayed reports. There were 26 instances of pneumonia reported. Other diseases in double figures include 105 cases of syphilis, 43 of gonorrhea, 39 of tuberculosis, 24 of measles, 15 of malaria, 15 of diphtheria, and 13 of cancer. Two cases of poliomyelitis were reported this week, and 8 cases of smallpox. For the fifth week of the year, ending February 4, the following diseases were reported in double numbers: Fifty-four cases of influenza, 47 of pneumonia, 45 of gonorrhea, 22 of syphilis, 14 each of diphtheria and cancer, 12 of pulmonary tuberculosis, and 11 of measles. The succeeding week showed that influenza had virtually disappeared, there being 16 cases reported. There were also reported this week 29 cases of pulmonary tuberculosis, 25 of gonorrhea, 20 of syphilis, 34 of whooping cough, 14 each of measles and cancer, and 12 of scarlet fever. Two cases of poliomyelitis were reported, as well as 2 of smallpox, and 2 of meningitis.

HEALTH OF NEW ORLEANS

The Department of Commerce, Division of Vital Statistics, has issued the following weekly reports concerning the health of New Orleans. For the week ending January 14, there were 104 deaths in the City, distributed 93 white and 47 colored, giving a rate for the three groups of 15.2, 14.2 and 17.6. For the week ending January 21, there occurred 171 deaths in the City of New Orleans, divided 118 white, 53 colored, giving a death rate for the whole group of 18.5, and for the last two 18. and 19.8. The infant mortality for this week was 101. For the week ending January 28, the death rate fell considerably, dropping to 15.7 as a result of 145 deaths in the City, distributed 83 white, with a death rate of 12.7, and 62 colored, with a rate of 23.2. The infant mortality rate this week was only 67. The following week, which ended February 4, showed a slight rise in the number of deaths in the City, there being 149 total, 100 white, and 49 colored, giving a death rate for the three groups of 16.1, 15.3, and 18.3. The infant mortality rate was virtually unchanged. For the week ending February 11, the total number of deaths and the consequent death rate was exactly the same as two weeks previously. There was, however, some change between the two races, 104 white individuals dying and 41 colored, giving a rate of 15.9 and 15.3 respectively. The infant mortality rate was only 53.

NEWS ITEMS

At the Fourth Congress of the Pan American Association, which will be held in Dallas, March 21-25, and of which Dr. John McReynolds is President, Dr. L. J. Menville is one of the Vice-Presidents of the Radiology Section. Dr. Menville also will read a paper at this meeting.

Dr. J. E. Knighton, Sr., Shreveport, has been elected to the Board of Governors of the American College of Physicians at the recent meeting in Montreal.

Dr. Thos. Benton Sellers, Assistant Professor of Gynecology in the Graduate School of Medicine of The Tulane University of Louisiana, attended the meeting of the Interurban Gynecological and Obstetrical Society held at Memphis, Tenn., Monday, February 13, 1933.

February 23, 1933, he addressed the meeting of the Sixth District Medical Society at Bogalusa, La., on Office Gynecology.

Assistant Surgeon Clifton K. Himmelsbach has been relieved from duty at the Marine Hospital in New Orleans and assigned to the Marine Hospital in Cleveland, Ohio.

TRI-STATE MEDICAL SOCIETY MEETING

The Annual Meeting of the Tri-State Medical Society will be held March 15 and 16 in Marshall, Texas. An interesting and instructive program has been arranged for the meeting of this active organization.

LOUISIANA STATE AUXILIARY NEWS

LOUISIANA STATE MEDICAL MEETING, Lake Charles, April 24-27. Also, the Meeting of the La. State Medical Auxiliary will take place there with the following officers presiding:

Mrs. Robt. T. Lucas, President, Shreveport, La.
Mrs. John H. Musser, President-Elect, New Orleans, La.

Mrs. George Kreeger, First Vice-President, Lake Charles, La.

Mrs. Wm. J. Norfleet, Second Vice-President, Shreveport, La.

Mrs. James Byron Vaughan, Third Vice-President, Monroe, La.

Mrs. John B. Benton, Fourth Vice-President, Minden, La.

Mrs. Francis E. LeJeune, Recording Secretary, New Orleans, La.

Mrs. Charles R. Gowen, Corresponding Secretary, Shreveport, La.

Mrs. Isadore Cohn, Treasurer, New Orleans, La.

Our State president, Mrs. Lucas, of Shreveport, has written to the various auxiliaries urging the members to attend the Convention. We hope that the Auxiliary members and other doctors' wives will avail themselves of the opportunity to enjoy the many pleasant hours Lake Charles is planning for us in their beautiful little city, so well known for its hospitality.

Of special interest to the Orleans Parish Auxiliary will be the installation as President of the State Auxiliary at the Convention of one of our very popular members, Mrs. John H. Musser.

Let us all start today to plan to meet at Lake Charles, April 24-27, and forget about depression for these few days, at least!

We wish to congratulate Caddo Parish Auxiliary for the recognition given them by our National Chairman of Press and Publicity, Mrs. Milton P. Overholser, in her January News Letter. The nice article sent in by Mrs. W. S. Kerlin of Shreveport was given in full and their 'hobby', The Pines Pre-ventorium, was commented upon most favorably. This big work should inspire all of us to likewise center our interests on one particular 'hobby' and thereby do some material good in every community.

Last year the Orleans Parish Medical Auxiliary had for its paramount interest the four Medical Conventions,—two State, Southern, and National—which met in their city, the success of which re-

warded to the fullest all the efforts exerted. This year, their work has been mainly along philanthropic lines.

A widespread program, under the guidance of the State Social Hygiene Society, has been sponsored by the Auxiliary, with Mrs. W. W. Butterworth, Chairman of a very active Committee. A series of lectures on Social Hygiene and the prevention of congenital syphilis have been given to the Parents-Teachers Clubs of the various public schools by physicians and social service workers. Literature has been given out at these meetings to disseminate knowledge to the growing boys and girls through their parents. Such pamphlets as: "Child's Questions and Answers", put out by the American Hygiene Association; and "Sex in Life, for Boys and Girls", put out by Dr. Donald B. Anstrong and Eunice B. Anstrong, were available.

The Auxiliary will also underwrite a Social Hygiene Institute which will be held during the spring by Miss Mary Wood of the Social Hygiene Association of New York. Their financial aid will make it possible for a free lecture to be given in the poorest part of the city where information of this sort is so much needed and so seldom heard.

Another committee headed by Mrs. S. M. Blackshear is making garments for the unemployed, under the auspices of the American Red Cross. This committee has already completed a hundred garments and will continue its good work until the Auxiliary is disbanded for the summer.

Mrs. L. W. Alexander, Chairman of the Philanthropic Committee, has added to their other good works that of aiding the Child Welfare Association in giving and distributing soup and delicacies

for the sick and needy through three of the Child Welfare centers.

Mrs. Isadore Cohn, president, is always lending a helping hand to all of these good works and never fails to encourage and recognize those who are making every effort to be real Auxiliary workers to our Medical Society.

Mrs. W. R. Buffington, Chairman,

Press and Publicity, La. State Aux. to the Med. Society.

DEATHS

THORNHILL, Francis Marion, Arcadia, La.: Born in 1849. Graduated from the Medical Department of the University of Louisiana, New Orleans, 1872. Dr. Thornhill was a Past President of the Louisiana State Board of Medical Examiners. He was a member of the Bienville Parish Medical Society, the American Medical Association, and was elected to Honorary Membership in the Louisiana State Medical Society in 1915. Dr. Thornhill died on December 5, 1932.

COCKER, George Forrest, New Orleans: Born in Brenham, Texas, in 1865. He lived in Louisiana about fifty years, and of that period thirty-five in New Orleans. He was a graduate of Tulane University in 1898. He was house physician at the Protestant Home for the Aged for twenty-five years. Dr. Cocker was a member of the Orleans Parish Medical Society, Louisiana State Medical Society, and American Medical Association. He died in New Orleans on February 12, 1933.

MISSISSIPPI STATE MEDICAL SOCIETY NEWS

ACKNOWLEDGMENT AND THANKS

In the February number of our Journal, Dr. P. T. Talbot, Secretary-Treasurer of the Louisiana State Medical Society, in a letter to Parish and District Secretaries, pays a compliment to the Mississippi News Section. In the same number, the Editor-in-Chief, Dr. John H. Musser, very kindly also takes occasion to comment favorably on the work of the Mississippi Editor.

We all like to receive praise for our efforts and we say, "thank you" to both of these good friends. But we would have them know that for whatever success has been attained thus far, credit belongs not to any individual or individuals, but rather to the Mississippi State Medical Association, a band of men with medical degrees, interested in the furtherance of organized medicine and its power for good. No one man or two or three men can make a successful news section. It needs and must

have the whole-hearted and interested help of men in every section of the State.

We, who at present are directing the Mississippi Section of the New Orleans Medical and Surgical Journal, give you who have helped, all the credit. We have fallen far short of what we want and expect to accomplish, but we are working with faith that some day every part of our state will be represented in every number of the Journal, and thus, working together, will our whole Association be the stronger.

And while on the subject of journals and comparisons, look up an old number of the New Orleans Medical and Surgical Journal, before Dr. John H. Musser became its Editor-in-Chief. Compare that number with the Journals of today, recognized and known as a leader among the many journals of this country. Who made it what it is? We take off our hats to its present Editor-in-Chief and say we are proud to work with you.

WANTED AT ONCE THIRTY GOOD MEN

Must be young, good looking, of prepossessing appearance, energetic, and willing to work.

In order to maintain and raise the standard set for the Mississippi Section of our Journal, it is necessary to have immediately editors for the following counties:

Benton	Marion
Carroll	Marshall
Chickasaw	Montgomery
Clarke	Newton
Coahoma	Perry
Covington	Rankin
Franklin	Scott
George	Smith
Green	Stone
Jefferson	Sunflower
Jefferson Davis	Tate
Lafayette	Tunica
Lamar	Walthall
Leake	Wayne
Lee	Yalobusha

Not more than one hour per month required.

Emolument—The sincere thanks of the editors and the satisfaction of doing something worthwhile for the good of our Association and the profession of Mississippi.

For particulars, address the Mississippi Editor.

OUR STATE CONVENTION

We wish to remind the physicians of Mississippi that our next State Convention will be at Jackson, May 9, 10, 11, 1933.

We are expecting a great meeting. The chairmen are preparing excellent program in various sections, something interesting and instructive to every doctor, whatever his line of practice. And the Central Medical Society, as host of the convention, will see that every facility is provided for the comfort and convenience of our guests.

We extend a cordial invitation to every member of the Association in the state, and urge you to lay aside your business and cares and come join us on this delightful occasion of study, rest and recreation. Take a four-days' vacation, come on in Monday and enjoy our clinics that afternoon, renew your association with old comrades, and make new acquaintances. Get some new ideas, new aspirations, and go back to your community a better doctor and a better man.—YOU CAN DO IT!

The invitation is extended not only to all the members of the Association, but to their wives. Begin now to make your plans. Get some new tires for the old flivver, have her overhauled, and take a delightful ride through the country. Bring your wife. The Woman's Auxiliary of Jackson is preparing some pleasant entertainments, and wish a full attendance of the doctors' wives, whether mem-

bers of the Auxiliary or not. There will be no "dress parades," so you don't have to hesitate on that account. We are all wearing our last year's clothes here,—that is, all except those who are still wearing year-before-last clothes!

D. W. Jones.

Jackson,

February 10, 1933.

COUNTY EDITOR APPOINTMENTS

Dr. F. L. McGahey, Calhoun City, President of the National Mississippi Thirteen Counties Medical Society, has made the following appointments of County Editors:

Monroe County—Dr. G. S. Bryan, Amory.

Chickasaw County—Dr. J. Rice Williams, Houston.

Prentiss County—Dr. R. B. Cunningham, Booneville.

Lowndes County—Dr. J. W. Lipscomb, Columbus.

Octibbeha County—Dr. J. F. Eckford, Starkville.

Calhoun County, Dr. W. J. Aycock, Derma.

Pontotoc County—Dr. R. P. Donaldson, Pontotoc.

Lee County—Dr. R. B. Caldwell, Baldwin.

Clay County—Dr. S. R. Deams, West Point.

Alcorn County, Dr. J. R. Hill, Corinth.

Noxubee—Dr. E. M. Murphy, Macon.

Ittawamba County—Dr. S. L. Nabors, Nettleton, R. F. D.

Tishomingo County—Dr. T. P. Haney, Iuka.

Dr. Preston S. Herring, Vicksburg, President of the Issaquena Sharkey Warren Counties Medical Society, has appointed Dr. Nathan B. Lewis, Editor for Warren County.

THE STATE IN MEDICINE

I note that Dr. Howard thinks a free discussion of the activities of the State Board of Health should be had by all its critics.

During November another conference on the ills of the medical profession was held at the headquarters of the American Medical Association. It was again brought out that men of the Ford and Rockefeller type have done more to bring the private practice of medicine into a socialized form of practice than all other influences combined. Some years previous a physician from West Virginia, read a paper before one of these conferences in which he stressed the fact that industry was anxious to control the fees charged by medical men, stating that it was practically the only factor now entering industrial cost that was not directly controlled by the capitalist. There was much discussion, but nothing done about it. Again, in November this same fact was brought out and the effect contract practice was having upon private practice particularly in West Virginia. Many deplored the fact that some type of insurance to provide low cost medical care or state control

seemed unavoidable. Those that expressed themselves regarded contract practice as unethical and a form of socialized medicine.

However, it seemed to occur to no one in this conference that practically every state in the Union now has fifty per cent or more of the practice of medicine on a straight contract basis and under state control. I have never been able to understand why the preventive side of medicine should be regarded as the exclusive job of the state. There are many phases to the work that make it much more desirable to the private practitioner than curative medicine. A man who prepares himself for the profession spends a great deal of time and money on the preventive study of medicine. Not long ago I heard the head of the state board state in a public address, that when his health unit entered a certain county of this state—one of the most populous, containing one of our largest cities—that only sixty-seven children had been immunized against diphtheria. He was asked since such an appalling state of affairs existed as revealed by those figures, if it would not be better to discontinue health units to the laity and have them work with the physicians for awhile. In this same address we were informed that the health officers were no policemen, that sanitary affairs were incidental and really no part of the public health work. In other words, we have it direct that the state is in charge of preventive medicine and as long as the profession attends to the curative side, they will probably be allowed to continue, but the preventive practice is lost revenue so far as the profession is concerned. In all these conferences referred to above when it came to a solution—to doing something about a bad situation—the representative of the national association said there was nothing they could do but advise, the men representing the states said it was a question for the county medical societies to handle. It does seem that the members of the county medical societies are the ones primarily concerned. Therefore, why should this condition continue? Preventive medicine should be taken over in this state by the local medical societies; the members of those societies should be the directors of the work; and the younger men who care to increase their income by doing preventive work in their communities should be given the opportunity. In California, this has been taken up and efforts are being made to organize nationally in order that the profession itself shall take over the preventive work now being done by agents of the state. Too often these agencies working outside the control of the profession become a means of creating the feeling in the public that probably our local physicians are not properly prepared for the practice of medicine, or they would themselves do the work that strange doctors are sent to do.

The money being spent on a central tuberculosis hospital should be distributed among the different counties and each county care of its own. The present institution should be leased to an individual or corporation on the basis now charged without any expense to the state. With five or six charity hospitals scattered over the state and a laboratory at the University and one at A. and M., there is no excuse for a CENTRAL laboratory that requires thousands of dollars to maintain.

The State Board of Health should be what it was originally, a bureau of public information for the exercise of police powers in epidemics when required by any local condition in the state. It should be speedily separated from the practice of medicine, preventive or otherwise, and if the medical profession has not the courage to do so, the usual discussions on "state medicine," "socialized medicine," "contract medicine," and other kindred subjects should be dropped as a waste of time. Just so long as public health workers spend most of their time traveling over the country trying to pry into some philanthropic fund, left probably by some capitalist who never paid a fair wage in his life, just so long will you have such reports as was recently issued on the "Costs of Medical Care," and more agitation for some form of medicine wherein others will dictate fees outside the medical profession. If philanthropists wish to entrust the medical profession of this state with a donation, relying on their honesty and intelligence in applying it, well and good, but if it becomes necessary for them to specify how many microscopes must be in the county and how many nurses and other help must be on hand, let them apply their own funds in their own way.

It is time for the local medical associations to take part in the practice of medicine instead of inviting a few men from out of town to rehearse some of the textbook information that is available to most of us that will go to the trouble of using it.

James C. Rice.

Natchez,

January 29, 1933.

MEDICAL WRITING

(Continued)

From "THE ART AND PRACTICE OF MEDICAL WRITING" Simmons and Fishbein. By permission.

"A florid, roseate style, full of polysyllabic, metaphorical phraseology, distracts the reader's attention. Seldom is it necessary in scientific writing to use other than simple, Anglo-Saxon terms to express an idea or to state a fact. The medical reader is acquainted with technical terms, but advantage should not be taken of this to make the sentences unduly polysyllabic. Particularly bad is the use of wrong literary allusions to give the impression of

learning, especially when the allusions have no direct relationship to the nature of the subject discussed. For example:

"The neurologist, with all of his knowledge of minutest anatomy, was for years like the "man who stood on the bridge at midnight," not dreaming the dreams of a Longfellow but soliloquizing after the manner of the cynic on the vanity of all earthly things when, lo, the voice of the syphilographer first cried from out of the darkness: "Fear not, for I am with you always."

"The following statement was submitted, exactly as here set forth with the request that it be published as written, ore returned to its author:

"By septaemia I main any virulent infection where pathogenic organisms together with their toxins invade the constitution; septic blood poison, not less, no other.

"I speak for free and unlimited drainage, a free and unlimited as successful fortification against the savage onrush of the enemy indicates. These drainages should be of gauze soaked in pure iodine. They should be renewed frequently until victory is assured. Pure, full strength iodine brought thus to impregnate the infected area, will diffuse itself as will no other remedy except turpentine, which is its only legitimate substitute. This brings it into close hand-to-hand combat with the invading enemy; they are immediately destroyed and there toxins neutralized. Iodine is so far superior to any other remedy in this conflict, that none other need be mentioned. It is the Field Marshall; the General Grant of such battles. The best of any other remedy save turpentine, it is iodine in such battles as a popgun is to a machine gun.

"I am firmly convinced after more than twenty years experience and study of this question that amputation in septaemia is a grave error. It serves no good purpose and has mutilation and other grave disaster as its inevitable consequences. Amputation at the crest of a septaemic blood poison, but clears the enemy deck for fiercer action. It is hurling a forty five Horwitzer against natures line of defense. The septaemic finger is a serious source of further infection but a short and fleeting moment. It is but the threshold across which a formidable foe has ruthlessly trod in his onrush to further and more serious conquest. Neither is the member, say of a hand, primarily attacked, necessarily rendered permanently useless. Major General Septaemia is too formidable and a wary a foe to tarry long. He is too viscous; too much concerned in rapidly overwhelming to utter destruction the whole body. He travels too rapidly. He does not maintain, neither does he need, a base of supplies. By attacking in the rear and isolating by amputation an abandoned camp is wholly ineffective military measure; the poorest of generalship.

"Personally I do not believe that amputation in septaemia is ever indicated. Certain it is that the more general the constitutional invasion becomes the least excuse there is for amputation. If amputation in this form of bloodpoison ever is indicated the operation should be deferred until there is an utter surrender and complete destruction the enemy.

"I think the crime ranking just below if not equal in septaemia, is poulticing. This is incubatin the specie that ranks as one of nature most formidable foes. A Doctor who would poultice in septaemia is the Commissary General in the service of the enemy. He should be arrested as a spy and jailed for the common good.

I believe electricity in its various therapeutic penetrating forms, such as the ultra violet ray is of distinct value in the treatment of all forms of bloodpoison."

"It was returned!"

(To be continued)

MISSISSIPPI STATE HOSPITAL ASSOCIATION
Columbia, Miss.,
February 3, 1933

"To The Hospital Workers of Mississippi.

"Dear Friends:

"A great philosopher once said 'Struggle is the law of growth'. With this inspiring thought and the lessons learned during the past two years, hospital executives in Mississippi will profit by the experiences they have had and the observations they have made. With these they will be able to present a more optimistic outlook on the future. We have all learned valuable lessons and have overcome some, seemingly insurmountable obstacles; increased our vigor and determination to carry on without sacrificing efficiency. Even though the sky still be cloudy, remember, the same rain that makes the mud causes the rose to grow.

"A brighter day is dawning for our hospital field, soon we will be able to provide more and better service than ever before; we will be able to render a more satisfactory service to our citizens as a whole. Then the poor will not be transported to parts unknown, specialism will be more widely disseminated in our community hospital groups, new community hospitals, efficiently operated, will replace our present most deplorable charity hospital system.

"There is much needs doing. We can all do our bit, but we can do a great deal more by coordinating our efforts and working together through our State Hospital Association. To those of you who are hitch-hiking along I sincerely hope for your own good and for ours and for the benefit of the communities we serve, that you will forward your dues to Dr. Lippincott promptly.

"Our annual meeting will be held in Jackson in conjunction with the State Medical Association. We are planning a most instructive program and I hope you will arrange to be with us and give us your much needed active support in handling our hospital problems.

"Sincerely,

"J. Gould Gardner, M. D.

"President."

THE TRAINING SCHOOL VERSUS THE USE OF TRAINED NURSES

It would appear from all that has been said and written within the last year or two that the question of nursing education is due for a thorough reorganization. I am in agreement with the general thought, but before any definite conclusion is reached we must have more facts and less guess work relative to the true status of the existing problems. The literature is teeming with admirably expressed experiences for and against the training schools in the standardized general hospitals, and one author we must conclude, is equally

as dependable as the other. It is obvious that the variation comes from the source of information which means that we are depending too much on questionnaires for fundamental facts and not from the standpoint of the individual hospital requirements and also their position in the community.

We are all I think in agreement that difficulties do exist and the great haste to do something about it has been precipitated by the ————. Due to this fact our thoughts and actions should be well balanced and our steps particularly careful in any reorganization when the world is so occupied with the task of providing food and clothing. The practice of medicine is hanging in the balance, so to speak, a more urgent question, don't you think, and its adjustment is certain to influence the nursing situation.

In attempting to answer the question of graduate versus student nursing I prefer using statistics of my own institution, for as previously stated the individual hospital problem should govern the type of nursing service. We prefer and desire to continue the student nursing service and at the same time we admit that the real reason is economy. However, it is not over emphasized exploitation, or selfish utilization, but necessary due to the constant demands made by the public for lower cost of illness. We feel that the full time employment of graduate nurses will increase exorbitantly the hospital charges which is not for the best interest of the average patient.

It has been said that the training school would be the most expensive of the two if operated really as schools. Do the ones speaking in such terms mean to separate the school from the hospital? I cannot see the viewpoint of these intelligent women who advocate this separation, and what is preventing them from seeing that by far the greatest advantage of their training is on the ward of the hospital. Viewing the matter from the viewpoint of the physician I would much prefer having the nurse who has been trained treating the sick rather than the one who has spent most of her time in theoretic instruction. We have had just recently in our employ one of these super-trained nurses and were forced to consider her a liability. She undoubtedly learned how to care for the sick by reading a book for her practical application was a failure. I do not mean to indicate that I am complaining because nurses of this type are so well informed, but I do prefer to outline and direct by own treatment and leave for the nurse the performance of the bedside care.

In choosing the training school we feel that the ones who pay the bills, the class from whom the support and maintenance of the hospital comes is better served. We try to be very conscientious in our reciplocation and I believe our girls are very well taught. For five years we have had four phy-

sicians, two registered nurses, one registered dentist, and a competent technician to teach them and they are enjoying it. I believe many of the smaller hospitals whose directors and staff take their schools seriously can direct and furnish ample material for instruction and qualify their graduates to compete with the graduates of the larger schools. There are no doubt exceptions but I cannot agree to the general statement that all hospitals with a daily average of less than twenty patients are incompetent of giving a reasonable course of training.

Upon the suggestions of others that the graduate nurses would be more satisfactory and more economical and upon the theory that one graduate could easily replace two or three students, we tried this plan. It didn't work. We found that one graduate could not do more than one student and to our surprise they objected bitterly to general duty, and too often reveal their attitude to the patient. This in time creates unhappiness and being dissatisfied they leave with very short notice. It is imperative that certain rules and regulations be made to govern the nurses and we find the average graduate not nearly so amenable to discipline as the student. She too often objects to orders from the supervisor and the kindest reprimand is not taken nearly so well as with the younger sister. The student is more conscientious and interested in the general work, less wasteful, and complains less.

It has been said that if graduates be allowed shorter hours, live in or out of the dormitory as they choose, increase salaries, and all a little more dignity to general floor duty, there would be less complaint and less resentment toward their work. Well spoken, but is it practical?

Nearly all of the hospitals with a daily average above one hundred patients have schools and I presume that they continue because it is the most practical solution of their requirements. The same principle prevails with the smaller institution, and so long as a standard, efficient and reasonable curriculum is maintained I see no reason to change. If there is conscientious interest taken in the school, and its applicants selected with care. I think every standardized general hospital regardless of size, would lower the cost per patient per day.

Richard Jennings Field

Centerville,
February 9, 1933.

NURSES AND NURSING

"Replying to your of January the 30th:

"It was not my purpose to precipitate a controversy when I expressed my views regarding training of the nursing profession. However, you have asked me to give a little more in detail my reasons

why small unit hospitals should not attempt to operate training schools. So here goes: There are various reasons why I think this should not be done.

"First: A unit hospital, to function properly, should be operated by people who have already been trained in their chosen field and each one assume responsibilities that are not safe to trust in the hands of the untrained.

"Second: It is not fair to the young lady or to the public at large, to put them through a three year course in a small institution where the material is not sufficient and the work is not varied enough to give them the training they could get in a larger institution. Isn't it a fact that nurses graduating from small institutions cannot compete with their co-workers from the large hospitals? They charge the same as graduates from larger institutions but can they do their work as efficiently and are they as trustworthy? 'I am asking you.'

"Third: We, as physicians and the public, are appreciating more and more the nursing profession and in all fairness to those who have prepared themselves PROPERLY and who have dedicated their lives to the relief of suffering humanity and are striving to hold their standard high, deserve just recognition, based on their degree of training, for their service."

F. B. Long.

Oktibbeha Hospital,
Starkville,
February 1, 1933.

THE NURSING DILEMMA

We read and hear much these days about the nursing situation. Articles discussing various problems concerning the nurse are conspicuous in our professional periodicals, and the subject has been discussed from every angle at recent nursing, medical, and hospital conventions. Reports from various committees reveal an appalling lack of educational facilities, and exploitation of the student, an overproduction of graduates, and a serious problem of unemployment. Most everyone agrees that something ought to be done about it, and many advocate radical changes in nursing education, but the most popular recommendation seems to be the discontinuance of small training schools and the replacement of the students in small hospitals with graduate nurses. Most of the suggestions to date have come from administrators of large institutions and organizations governing nursing education, and it is with the hope of stimulating a more general discussion of the subject among administrators of our small hospitals and the clinicians, that I am prompted to express my views.

When we remember that approximately seventy five percent of all hospitals have less than one

hundred beds each, and are located in rural districts where suffering is more acute and the actual need of nurses greater than in the medical centers, we realize that the small hospital deserves due consideration in the edevelopment of relationship between hospical, community, and nurse. Those of us who are familiar with the existing conditions of rural districts, small hospitals, and the type of nurse best fitted to supply the needs of our patients, should make an effort to exert some influence on the many agencies that are feverishly endeavoring to change this relationship.

There is no denying that with the present limited field of labor there is an overproduction of nurses. But why place the blame on the small hospitals? Is it not very evident that there is an oversupply of hospitals, doctors, bankers, plumbers, and all other classes of labor, as well? The frantic appeals of nursing organizations to curtail the production of nurses is justified under existing conditions, but I fear they are tempered with a hysteria of ——— development. I do not believe that the problem will be solved by merely discontinuing small training schools and replacing the students with graduates in the small hospitals. Schools that are striving to measure up to the higher educational standards, should be preserved, whether large or small. Where can the nurse be better educated than in the hospital of the community where she is to practice, providing that hospital can adequately equip her for the service expected of her by her own people? I do believe, however, that the problem can be solved by raising the standards of nursing education to the level where the process of selection will reduce the number.

The real problem, in my opinion, is to formulate a set of standards that will separate the grain from the chaff. I am old fashioned enough to believe that real nurses are born and not made, and that their number is far below the demand. If training schools could select and adequately train the comparatively few women who wish to become nurses through a love of service rather than solely as a means of earning a livelihood, then the problem of quality as well as quantity would be solved. I realize that personal judgment on the part of administrators and instructors is a major factor in the process of selection, yet there are a few general standards that can be applied that would tend to discourage the undesirable from the beginning, and I wish to emphasize one, which in my own experience gave rather startling results. In August, 1931, as an economy measure as well as an effort to raise the standard of our training school, I discontinued the payment of monthly stipends to student nurses, and very promptly four of the nine students chose to give up their training rather than the eight to twelve dollars per month that they had been receiving. One admitted very frank-

ly that she accepted training because it furnished maintenance and a few dollars for spending money. The others were less frank, but what other conclusion can we draw? Discouraging as this revelation seemed at the moment, these consoling facts remained. It was rid of several undesirable students which I had inherited, and had been trying to find a painless method of dispensing with. All of the desirable students staunchly accepted the change with a spirit of cooperation. The vacancies were quickly filled with desirables. We no demand a high school education as an entrance requirement, a six months probation period to determine fitness, and offer nothing but comfortable living, fair treatment, and an opportunity to learn how to care for the sick in a manner becoming a nurse. Why should training schools pay their students salaries? A course of three years in a school of nursing is the equivalent of a university course leading to a B.A. degree, and it is very evident that from a financial standpoint the nurse has paid much less for her education than has the university graduate receiving her degree. The present system permits the student nurse to pay for her own education in service, and such service should not be valued in dollars received, but as a part of what she pays for her education. The ease with which a nurse receives her R.N. is undoubtedly part of the answer as to why the field is overcrowded and the quality in many, inferior.

The very pertinent question now remains, can we offer adequate educational facilities to our students—to justify them sacrificing three years of service and endeavor in our institutions? I am egotistical enough to believe that with our added knowledge of the conditions and people to which most of our graduates will have to adapt themselves, we can prepare them as well, if not a little better, than can the larger institutions that will place them in distant and foreign environment. Are we equipped to properly educate a nurse? If by proper is meant the equivalent of an M.A. or Ph.D. degree, frankly, I will admit that we are not. But if by proper is meant someone capable of doing the actual nursing necessary for the recovery of our patients, then, I believe that we are. I am inclined to wonder if the nursing regulating bodies which overemphasizes the theoretical and medical consideration of the patient's disease does not do so at a sacrifice of the mysteries of the draw sheet, the pillow, and the gentle touch which soothes the aching brow.

He that portrays an evil without suggesting a remedy is all-accepted in our profession, so in self-defence I offer these few suggestions:

1. That at least a high school education be demanded of every applicant as an entrance requirement to our training schools.

2. That all hospitals discontinue paying monthly stipends to student nurses.

3. That an adequate probation period be instituted and fully exercised to facilitate a more careful selection of students.

4. That in the curriculum greater stress be placed on bedside teaching and the psychology of the sick.

5. That hospitals discontinue the use of students for special duty with all patients that can afford to pay a graduate nurse.

A. M. McCarthy.

Electric Mills.

AMERICAN COLLEGE OF SURGEONS

Dr. Franklin H. Martin, Director General of the American College of Surgeons, has announced that there will be no sectional meeting in Mississippi during 1933. Sectional meetings this year will be as follows:

Phoenix, March 27-28—Arizona, New Mexico.

Los Angeles, April 3-4—California, Nevada.

Spokane, April 10-11—Washington, Oregon, Montana, British Columbia.

Salt Lake City, April 17-18—Utah, Colorado, Wyoming, Idaho.

MISSISSIPPI STATE BOARD OF HEALTH

Dr. C. St. C. Guild, representative of the National Tuberculosis Association, was a visitor to the Mississippi State Board of Health for several days during January. While here, Dr. Guild made a visit to the State Tuberculosis Sanatorium. Dr. Guild is former director of the Lee County, Mississippi, Health Department, Tupelo.

The following is from Dec. 21, 1932, issue of the JACKSON DAILY NEWS:

IUKA PHYSICIAN IS CHAMP

Attends Birth Every Other Day

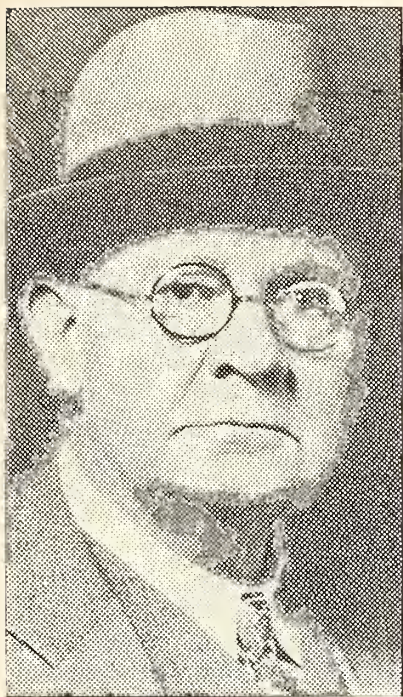
Dr. Stork's Chief Aide.

Now that the all-American has been selected and Mr. Roosevelt's cabinet confidentially disclosed 100,000 different ways by 100,000 enthusiastic admirers, Dr. R. N. Whitfield, chief of the state bureau of vital statistics, steps forward with this refreshingly authentic bit of news:

Dr. A. F. Whitehurst of Iuka is Mississippi's champion stork doctor.

Birth registration records show that Dr. Whitehurst attended 165 births in Mississippi in 1931 and 115 during the first nine months of 1932. In addition, the bureau discovered, Dr. Whitehurst from his strategic base at Iuka up in Northeast Mississippi, officiates at new arrivals in Alabama and in Tennessee.

"Thus he has a record averaging one case every other day," Dr. Whitfield commented. "We can't see how he does this tremendous amount of work



DR. A. F. WHITEHURST
Iuka, Mississippi

in addition to his general practice, but as far as Mississippi births are concerned, the records are on file in the bureau and he doesn't deny the charge."

South Mississippi supplies the runner-up for champion stork doctor honors. He is Dr. J. B. Thigpen of Bay Springs, whose practice carries him over into Smith and Jasper counties. His 1931 record was 122 births and for this year's first nine months, his total is 97.

Among the myriad files in Dr. Whitfield's health board division is one that keeps a minute check on every physician in the State and his birth-reporting. A photostatic copy of the record of birth-reporting for each physician in Mississippi was mailed each practitioner last week, he explained, to assure an accurate check.

Dr. Whitfield is keenly appreciative of the work the Mississippi physicians are doing. "I believe," he declares, "a distinguished service to humanity medal should be designed for the practitioner in every state who has been found to have administered aid and comfort to the greatest number of women during the trying ordeal of childbirth.

"Many physicians in Mississippi give their time and strength to make this ordeal safer for mother and child, knowing in advance that in a large per cent of the cases they will never receive any financial remuneration. Our state and every county should make ample provisions to see that every poor woman who has no means shall obtain the proper prenatal, natal, and postnatal care."

Other physicians attending large number of births in Mississippi are as follows:

	1932	Through Sept., 1932
Dr. E. N. Blount, Bassfield	59	56
Dr. F. L. Brantley, Madden	65	56
Dr. B. H. Campbell, Indianola	51	61
Dr. W. M. Coursey, Raleigh	26	48
Dr. W. H. Curry, Eupora	54	47
Dr. R. G. Dabbs, Shannon	78	70
Dr. D. L. Harper, Stonewall	83	54
Dr. J. M. Hood, Houlika	69	43
Dr. W. H. Rood, Toccopola	66	56
Dr. E. L. Walker, Magee	94	67

CORRECTION OF ERROR

During 1932, a letetr was received by the State Board of Health stating that "Dr. Buie passed away on June 28." As there has been only one Dr. Buie practicing in Mississippi, it was thought, quite naturally, that he was dead. For that reason, the name of Dr. N. H. Buie, Fayette, Mississippi, was placed on the list of Mississippi physicians dying during 1932.

Investigation showed that the Dr. Buie who died was E. H. Buie, veterinarian, Natchez, Mississippi.

Sincere apology has been made to Dr. Buie. In all probability, he felt, as did Mark Twain when his death was through error announced, that the report was "greatly exaggerated."

We are all glad Dr. Buie is still actively engaged in the practice of medicine. He is a practitioner of the type we are all fond and proud of.

It is interesting to notice that divorces granted in Mississippi during 1932 had slumped forty per cent in number from the figure representing those granted in 1929. There is no doubt but that the prevailing _____ has had more to do with the fall in divorce rate in Mississippi than any other factor. Negro divorces have slumped to a greater extent than the white which further proves the contention that the _____ is affecting the divorce mill. Sixty-eight per cent of the divorce suits, filed last year were from childless homes. Seventeen per cent were from homes containing only one child each.

Since good roads have been built and the doctors have more or less concentrated in the towns, and undertakers are located in the larger places, it is found to be of advantage to consolidate local registrar districts. For example: In Jones County, Mississippi, there are now twenty local registrars. Plans are on foot now to consolidate this work into the hands of only six registrars. In the opinion of the Jones County health officer and of the State Board of Health, the work will be done more efficiently under the new plan.

Please add to the list of physicians who died during 1932 the following:

Dr. Thomas J. Crofford, Jackson, Age 48.

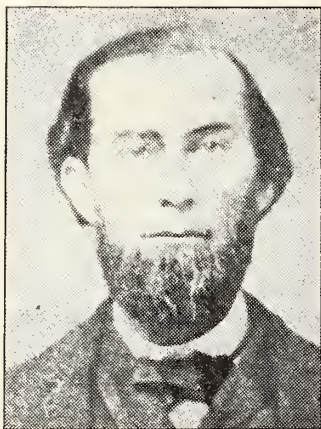
Carcinoma of stomach and liver. Died December 14, 1932.

Felix J. Underwood.

Jackson,

February 7, 1933.

LEST WE FORGET THEIR GOOD WORKS



DR. C. B. GALLOWAY

Canton, Mississippi

President, Mississippi State Medical Association,
1872-73

C. B. Galloway was born in Brunswick County, N. C., April 15, 1825, and moved to Mississippi in 1841. He served one year as surgeon in the Confederate army and settled in Canton in October 1863.

Dr. Galloway was one of the organizers of the Association, being present at the meetings in 1856 and 1869. At the latter he was chosen delegate to the A.M.A. He served as vice-president in 1872-73 and as corresponding secretary in 1873-4 and was chosen by the Association as a member of the State Board of Health.

He died in Canton June 3, 1877, of apoplexy.

Dr. C. S. Priestley.

NOTE.—If anyone knows of any additions or corrections that should be made to the above sketch, please communicate with Dr. E. F. Howard, Historian, Vicksburg.

NEWTON INFIRMARY

Hope this news will not be too late for publication, let the time slip up on me, very little to report in this vicinity, however.

Dr. J. L. Parkes has moved from Union to Nes-hoba.

Dr. and Mrs. O. Simmons of Newton will attend the Tri-State Medical Meeting in Memphis next week.

Dr. M. L. Flynt, formerly of Newton, now domi-

ciled in Meridian, will also attend the Tri-State Meeting.

Mrs. S. Kemp, Secretary.

Newton,

February 10, 1933.

CENTRAL MEDICAL SOCIETY

The January meeting was held in the auditorium of the Robert E. Lee Hotel with 45 members present. President John Howell called the meeting to order, and made a few remarks outlining the work for the current year. Each program will consist of three parts: Clinical cases; reports on current literature; scientific essays. The work will be so arranged that each of the several departments of medicine and surgery will be touched upon, so that every member will find something of special interest at each meeting, and so divided that every member of the society will have a chance to appear on the program at least once in the year.

Under clinical reports, Dr. Wilde presented a case showing a transplantation of a section of buccal mucous membrane for the correction or recurrent pterygium, a very successful operation. Dr. Kemp presented some excellent roentgenograms showing some unusual phases of pulmonary tuberculosis, and another of lymphosarcoma of the mediastinum. Dr. Hall presented a case of "creeping eruption", a very rare condition, the first case he has seen originating in this section. The treatment is freezing the surface over the eruption with ethyl chloride spray.

Dr. Bullock presented an abstract of current literature on pediatrics, after which the regular scientific program was taken up. Dr. Adkins presented "The Treatment of Nasopharyngitis With Compound Tincture of Benzoin," which paper was discussed by Dr. V. D. Hagaman. Dr. Frank Hagaman presented a paper on "The Use of Living Sutures from Fascia-Lata in the Treatment of Fractures of the Patella," which paper was discussed by Drs. Wall, Swayze and Gordin. Dr. Jones reported "A Unique Obstetrical Case," very much to the amusement of the audience.

Under business, the chairman reported the following committees:

Program Committee: R. W. Hall, H. F. Garrison, Rembert, Noblin and Harris.

Medico-Legal: Boswell and Walker for Simpson; Crisler and Long for Hinds; Fore and Melvin for Madison; Whitfield and Hollifield for Rankin; O. O. Austin and Anderson for Scott; Swayze and Coker for Yazoo.

Censors: Adkins, Walley, F. Hagaman, for Hinds; Smith for Madison; Watson for Rankin; Giles for Simpson; R. B. Austin for Scott; Anderson for Yazoo.

The committee on Constitution and By-Laws, by Dr. Rembert, presented a proposed copy of the same

which was read and carried over to the next meeting.

Dr. Nathan Kendall was presented for membership and his name referred to the Board of Censors.

Robin Harris, Secretary.

Jackson,
February 19, 1933.

DELTA MEDICAL SOCIETY

The Delta Medical Society meets in Greenville on April 12. All members and all doctors who are interested in a real live wire medical society, in which there are excellent papers and plenty of interest and pep, are cordially invited to attend. The Delta Medical Society has proven to be one of the best in the state, and anyone who fails to attend the meetings misses much. The committee on entertainment is composed of Dr. D. C. Montgomery, Dr. J. B. Hirsch, and Dr. J. A. Archer. These gentlemen promise a most excellent program which will be given during the banquet, a feature that follows the scientific program.

John G. Archer.

Greenville,
February 8, 1933.

EAST MISSISSIPPI MEDICAL SOCIETY

East Mississippi Medical Society will meet on the mezzanine floor of the Lamar Hotel, Meridian, Thursday afternoon, February 16, at 3 o'clock.

PROGRAM

Goitre: By Dr. H. Lowry Rush, Meridian.

Discussion opened by Dr. Leonard Hart.

Some Phases of the Relationship of Physicians to Dentists: By Dr. J. H. Brown, Dentist, Newton.

Discussion opened by Dr. G. W. Bounds.

Symptoms of Colon Dysfunction,—Diagnosis and Treatment: By Dr. Henry G. Rudner of the Dr. Henry G. Rudner Clinic, Memphis, Tenn.

Discussion by Drs. I. W. Cooper and A. L. Majure.

Meeting will be called to order promptly at 3 P. M.

Members of the dental profession are cordially invited to attend and take part in the discussion.

Dudley Stenis, President.

T. L. Bennett, Secretary.

Meridian,
February 11, 1933.

HARRISON-STONE-HANCOCK COUNTIES MEDICAL SOCIETY

The Harrison-Stone-Hancock Counties Medical Society met February 1, at the Biloxi Hospital with the usual good attendance.

Several very interesting subjects were discussed, one being the "Attitude of the Reconstruction Finance Corporation Towards the Medical Profession." A very interesting paper, "Prolonged Fever With-

out Demonstrable Cause," was presented by Dr. B. Z. Welch of Biloxi, and discussed by Drs. Dearman, McCall, LeBaron and Rafferty. Dr. Stevens presented a case, "Short Time Recovery from Cataract Operation." Discussion was by Drs. Werlein, Dearman and Carroll. Dr. E. C. Parker reported a case of "Abdominal Aneurysm" recently seen by him.

The next meeting will be held at Bay St. Louis.

George F. Carroll, County Editor.

Biloxi,
February 7, 1933.

HOMOCHITTO VALLEY MEDICAL SOCIETY

A meeting of the Homochitto Valley Medical Society was held in Natchez, January 12, at 2 o'clock P. M., in the private dining room of White's Cafe. Dr. Felix J. Underwood, Executive officer of the Mississippi State Board of Health, was the guest of honor. Other visitors included Drs. F. L. Thomas, St. Joseph, La. and Dr. Charles Gordon, Sicily Island, La. The scientific program included the following:

"The Present State of Public Health."—Dr. F. J. Underwood, Jackson.

"A Piece of Steel in the Lense of the Eye Removed By Magnet Through the Original Wound," and "Brain Tumor Operation."—Dr. L. S. Gaudet, Natchez.

Twenty members attended and a luncheon was served.

L. Wallin, County Editor.

Natchez,
February 10, 1933.

ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY

The regular monthly meeting of the Issaquena-Sharkey-Warren Counties Medical Society was held at the Hotel Vicksburg on February 14, at 7 P. M.

Dr. J. M. Acker, Jr., Aberdeen, President of the Mississippi State Medical Association, was present and addressed the Society.

The following papers and discussions were presented, the program having been prepared by Dr. T. P. Sparks, Jr., Chairman:

1. A Case of Ruptured Meckel's Diverticulum.—Dr. H. B. Goodman.

Discussed by Dr. Parsons.

2. Transurethral Prostatic Resection.—Dr. A. Street.

Discussed by Drs. T. P. Sparks, Jr., W. E. Johnston, J. B. Benton, H. H. Haralson, and P. S. Her-ring. Dr. Street closed. Apparatus and instruments were demonstrated.

3. A Case of Calculus Pyelonephrosis.—Dr. T. P. Sparks, Jr.

Discussed by Drs. J. A. K. Birchett, Jr.; P. S. Her-

ring, S. W. Johnston, E. F. Howard, and E. H. Jones. Dr. Sparks closed.

The Society endorsed a birth control bill now before the Senate Judiciary Committee, to exempt physicians, medical colleges, and hospitals from the provisions of the present Federal Birth Control laws.

A communication was received from the Central Medical Society asking an exchange of essayists. The matter was approved and Dr. T. P. Sparks, Jr. was appointed to represent the Society before the Central Medical Society.

A Committee consisting of Drs. Sydney W. Johnston and E. F. Howard presented resolutions on the recent death of Dr. M. H. Bell and they were adopted.

The Society voted to hold its meetings at the Hotel Vicksburg until further decision.

The next meeting of the society will be held on Tuesday, March 14, at 7 P. M. and will open with a supper.

DR. MACE H. BELL

Whereas, death has taken from us one of our most loyal and honored members, and,

Whereas, a close affiliation and fellowship of fellowship of thirty unbroken years has endeared to us one whose life in every way exemplified all that the word PHYSICIAN should mean, and,

Whereas, the wife, faithful companion of his entire professional career has lost a most loving husband, a son and daughter an indulgent and honored father, the community a valuable citizen and this society one of its truest, wisest and most capable members;

Therefore, be it resolved by the members of the Issaquena-Sharkey-Warren Counties Medical Society, feeling as they do the great loss to the medical profession of the entire southland in the death of Mace H. Bell, that we hereby offer and adopt these resolutions and resolve further that a copy be spread upon the minutes of this society and a copy be sent to the bereaved family.

Sydney W. Johnston.

E. F. Howard.

Adopted at the regular meeting of the Issaquena-Sharkey-Warren Counties Medical Society held at Vicksburg on February 14, 1933.

PIKE COUNTY MEDICAL SOCIETY

The Pike County Medical Society met Thursday, January 5, at the Baptist Church.

After the dinner, it was decided that the old committee on programs be re-appointed.

Dr. Thomas Purser, Jr., read a paper on "Treatment of Fractures of the Vertebrae Used by Drs. Purser and Ford in Birmingham." This paper was very interesting and a motion was made and seconded that the secretary be authorized to make

a mimeographed copy of this paper and send it to each member of the society.

Two cases were reported by Dr. L. W. Brock. Cases were also reported by Drs. T. E. Hewitt, E. M. Givens and M. D. Ratcliff. There were discussions by Drs. Purser, L. J. Rutledge and Elise Rutledge.

Dr. Milne of the State Board of Health was a visitor. The following members were present: T. B. Abney, W. O. Biggs, L. W. Brock, R. H. Brumfield, E. M. Givens, T. Paul Haney, Jr., T. E. Hewitt, Thomas Purser, M. D. Ratcliff, Elise Rutledge, L. J. Rutledge.

The society met Thursday, February 2, at 6:30 P. M., at the Methodist Church. After dinner, the meeting was called to order by Dr. L. W. Brock. The minutes of the last meeting were read by the secretary. Motion was then made by Dr. M. D. Ratcliff that Drs. Stennis and W. M. Biggs be made honorary members of this society, and that the secretary make inquiry as to whether or not the society would be required to pay their dues for the year of 1933.

It was then brought to the attention of the society that no delegate to the state society meeting had been appointed. After nomination by Dr. Givens, the society elected Dr. W. O. Biggs as delegate to the state meeting this year. Dr. T. Paul Haney, Jr. was elected alternate.

The scientific program was then started by the introduction of Dr. Boswell by Dr. L. W. Brock. Dr. Boswell addressed the society on the subject: "Diagnosis and Treatment of Tuberculosis." Dr. Boswell stated that tuberculosis infection was the most frequent of all infections with which man is afflicted. He emphasized that every physician should always remember this and look for tuberculosis in every patient examined. He estimated that the physicians see no more than 10 per cent of the active cases of tuberculosis, therefore, he states by far the majority of active cases get well. He mentioned the Mantoux test only to state that it was harmless, and that it only tells that the patient has had tuberculosis infection. He emphasized that advice to the patient by the family physician was probably one of the greatest factors in the results to be obtained with each individual case. He stated that the ability of the physician to obtain mental rest by the patient as well as physical rest was most important. In closing his address he repeated that rest, fresh air and food were the three essentials in the treatment of tuberculosis.

The society adjourned after an expression of appreciation to Dr. Boswell was made by several of the physicians. The following physicians were present: T. B. Abney, L. W. Brock, R. H. Brumfield, W. F. Cotton, E. M. Givens, T. Paul Haney,

Jr., W. C. Hart, B. J. Hewitt, Thomas Purser, M. D. Ratcliff, Gladys Ratcliff, J. M. Smith.

Visitors present were: Dr. A. H. Harvey of Tylertown and Mrs. Thomas Purser.

T. Paul Haney, Jr., Secretary.

McComb,

February 8, 1933.

SOUTH MISSISSIPPI MEDICAL SOCIETY

Just a few words from the South Mississippi Medical Society. We felt very grateful over the large percentage of doctors who have paid their dues for the year 1933. We have sixty-three paid up at present and we are still receiving checks. We urged all of our members if possible to pay up before the books were closed so they would be protected in the State Medico-Legal Act. The majority of our men took advantage of this fact. Our program committee has not announced its program for our next meeting on March 9 to be held in Laurel. I am sure that they are working on this at this time and that some results will be seen before many weeks.

J. P. Culpepper, Jr., Secretary.

Hattiesburg,

February 11, 1933.

ADAMS COUNTY.....Missing

ALCORN COUNTY

Drs. Stanley Hill and Guy Caldwell, Shreveport, La., visited their homefolks and friends during the the Christmas holidays; also our promising crop of future doctors, R. B. Warriner, Jr., from Emory, Davis Chipps from Louisville, and Leroy Brackstone, Laney Whitehurst, and Sam Stephenson from University, Tennessee.

Dr. Dabney Hurt has returned from Atlanta, Georgia, and is now associated with Drs. W. W. and M. H. McRae, Corinth.

Dr. S. L. Stephenson is in Mayfield, Ky., attending his sister who is dangerously ill.

How many doctors are collecting any sales tax from their patients as intended by the law? We are all having to absorb it. And a big proportion is from discounted bills. Doctors are poor collectors for themselves and worse in collecting any tax additions. This is a question that should be discussed at our State Association meeting. As it stands we just have an increased tax. I think if the sales tax continues our privilege tax should be abolished.

W. A. Johns, County Editor.

Corinth,

February 6, 1933.

AMITE COUNTY.....Still Missing

ATTALA COUNTY.....Still Missing

BENTON COUNTY.....Still Missing

BOLIVAR COUNTY.....Missing

SALHOUN COUNTY.....Still Missing
CARROLL COUNTY.....Still Missing
CHICKASAW COUNTY.....Still Missing
CHOCTAW COUNTY.....Still Missing
CLAIBORNE COUNTY.....Still Missing
CLARKE COUNTY.....Still Missing
CLAY COUNTY.....Missing
COAHOMA COUNTY.....Still Missing
COPIAH COUNTY.....Still Missing
COVINGTON COUNTY.....Still Missing
DE SOTO COUNTY.....Missing
FOREST COUNTY.....Missing
FRANKLIN COUNTY.....Still Missing
GEORGE COUNTY.....Still Missing
GREEN COUNTY.....Still Missing
GRENADA COUNTY.....Still Missing
HANCOCK COUNTY.....Still Missing
HARRISON COUNTY.....Still Missing

HINDS COUNTY

Dr. and Mrs. Guy Verner of Jackson spent several days with friends and relatives in Birmingham the latter part of January.

Dr. M. Brister Ware motored to Houston and Columbus on business the early part of January.

Dr. L. B. Moseley motored to Birmingham last week end and reports that business there is as good as it has been during the past few months, that is, ready for the black ribbon.

The profession will be sorry to learn that Dr. H. R. Shands of Jackson is confined to bed at Sanatorium for a period of relaxation.

The staff of the Baptist Hospital met the evening of February 7. A good crowd was present and a splendid program and dinner was enjoyed. The superintendent always has encouraging remarks to make at these meetings.

William F. Hand, County Editor.

Jackson,

February 6, 1933.

HOLMES COUNTY.....Missing

HUMPHREYS COUNTY.....Still Missing

ISSAQUENA COUNTY.....Still Missing

ITTAWAMBA COUNTY.....Still Missing

JACKSON COUNTY

We wish to announce the marriage of Miss Helen Compton Richards of Plaquemine, La., and Dr. Frank O. Schmidz of Ocean Springs, Miss. Miss Richards was a member of the nursing staff of a government hospital in New Orleans. Dr. Schmidz practices in Ocean Springs and is president of Jackson County Medical Society.

Miss Sarah Lander, daughter of Dr. R. G. Lander, spent the week-end last week with her sister, Miss Emma Lou Lander, who is a student at Whitworth College.

Dr. J. N. Lockard and family visited relatives

and friends in New Orleans last week. We wonder if Dr. Lockard was responsible for the rush on the banks in New Orleans.

Dr. and Mrs. S. B. McIlwain were called to Waynesboro and Laurel on account of illness of relatives.

At a regular meeting of the staff of Jackson County Hospital Thursday night, February 9, the committee on Constitution and By-Laws made a report which was adopted, so we are one more step towards a standardized hospital which we hope to have real soon.

Some interesting case reports were given which were generally discussed by all present. Also the monthly report of the hospital was read.

S. B. McIlwain, County Editor.

Pascagoula,

February 10, 1933.

JASPER COUNTY.....Still Missing
JEFFERSON COUNTY.....Still Missing
JEFFERSON DAVIS COUNTY.....Still Missing

JONES COUNTY

During the early part of January, Dr. R. H. Cranford, the popular and efficient superintendent of the South Mississippi Charity Hospital, was stricken with a heart attack and since that time has been confined to his bed. He had a very acute attack of angina but at present seems to be on the road to recovery. Dr. O. W. Bethea of New Orleans came and met the local physicians in consultation regarding his condition.

Dr. M. P. Bush has been named by Dr. Cranford as assistant superintendent of the charity hospital. Dr. Alexander has been given the appointment of house surgeon.

Dr. Jim Dorsett of Lucedale was a visitor in Laurel on February 8. Dr. Dorsett is chairman of the board of trustees of the charity hospital and was here attending a meeting of the board.

Dr. J. F. Scarorrough, who has been located in Laurel for the past twenty years and has been doing industrial work for Warsaw Southern Lumber Company, has closed his offices in Laurel and moved to Brookhaven where he is engaged in private practice, the Warsaw Company having close their large mill here due to the fact that they have exhausted their timber.

Dr. R. H. Foster, who has been located in Laurel for the last ten years, has gone back to his first love and is again connected with a large hospital in New York as army surgeon.

Dr. E. M. Gavin, owner and operator of Stafford Springs Hotel, was a business visitor to Laurel during the past week. Dr. Gavin says that it will be necessary for him to ship more of the famous Stafford Springs water now, as he and Mrs. Gavin are rejoicing over the arrival of a baby girl.

An obstetrical clinic has recently been organized in Laurel under the direction of the Junior Auxiliary. They have perfected an organization whereby the expectant mothers who are unable to have proper medical services provided for them can be taken care of. They have arranged with Mrs. Varnado, superintendent of the Laurel General Hospital, to take care of each patient for a period of three days. The following Laurel doctors have been named on the staff to look after the deliveries: Dr. Lovett Golden, Dr. Tom Ramsey, Dr. R. T. McLaurin, Dr. J. K. Oats, and Dr. Jos. E. Green.

Drs. Gray and Hand of Waynesboro were professional visitors to Laurel last week. They brought over a patient for operation at the Laurel General Hospital.

Dr. Stover McIlwain of Pascagoula was shaking hands with friends in Laurel during the early part of February.

At a recent meeting of the trustees of the South Mississippi Charity Hospital it was announced that unless more funds could be procured for continuing the hospital it would be necessary to close on June 1.

Misses Willie Ray Carter and Vennie Carney, nurses at the charity hospital, were operated on last week for appendicitis. At present both girls are doing fine and will soon be back walking the floors again.

Dr. R. T. McLaurin is again doing active practice. Bob's practice interfered very much with his bird and deer hunting, but since the close of the season he is back on the job looking for somebody to cut on.

Dr. J. E. Green, present Grand Master of Mississippi Masons, was in Jackson from February 12 to 15 attending the Annual Communication of the Grand Lodge.

Drs. Gatlin, Cranford, and Tom Ramsey were named as program committee to arrange the program for the next meeting of the South Mississippi Medical Society to be held at Staffords Springs the second Thursday in March. The doctors are getting up a very attractive program and a large attendance is expected.

Dr. G. E. Eddy, popular physician of Heidleburg, was calling on some of his professional friends in Laurel last week.

Jos. E. Green, County Editor.

Laurel,

February 11, 1933.

KEMPER COUNTY

A recent health survey was made of the school children of Electric Mills, sponsored by the local Community Culture Club, and conducted by the staff of Geo. C. Hixon Memorial Hospital, assisted by Dr. C. A. Ray, Jr., dentist of Meridian.

Dr. C. M. Gully was elected chairman of a recently organized County Taxpayers League.

A. M. McCarthy, County Editor.

Electric Mills.

February 9, 1933.

LAFAYETTE COUNTY.....	Still Missing
LAMAR COUNTY.....	Still Missing
LAUDERDALE COUNTY.....	Missing
LAWRENCE COUNTY.....	Still Missing
LEAKE COUNTY.....	Still Missing
LEE COUNTY.....	Still Missing

LEFLORE COUNTY

Dr. George W. Baskervill, Greenwood, was appointed chief surgeon of the Columbus and Greenville Railway Company, with office at Greenwood, succeeding Dr. W. C. Brewer, Columbus, deceased, effective February 1.

Dr. J. A. Milne of the State Board of Health visited the county health unit at Greenwood on January 18.

At the January meeting of the staff of the Greenwood-Leflore Hospital the following officers were elected for 1933: President, Dr. G. Y. Gillespie, Jr.; Vice-President, Dr. J. P. Kennedy; Secretary, Dr. W. E. Denman.

Dr. D. T. Sayle, Highlandale, Leflore County has moved to Black Hawk, Carroll County, to practice.

Drs. F. M. Sandifer, W. E. Denman, and W. B. Dickens attended the annual stag dinner (quail) given by Dr. J. D. Biles at Sumner, the evening of Wednesday, February 1. There were about 25 doctors present and a most enjoyable evening was spent.

Dr. Ira B. Bright, who is now serving his internship at Touro, New Orleans, and Miss Mildred Durrett of this city, were married at the First Methodist Church, Greenwood, at 4 P. M., Tuesday, February 7.

W. B. Dickens.

Greenwood,

February 8, 1933.

LINCOLN COUNTY.....	Still Missing
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LOWNDES COUNTY

The editor in chief suggests that if the correspondents have anything on their minds that they would have brought before the State Medical Association, that it would be a good idea to offer the suggestions through the county editors. Now I do not wish to appear "holier than thou" but I do think it is a good time to have two papers brought before the younger men of our profession. One could come under the topic of "Medical Ethics," and the other would be "The Patient a Human Being" (Not a number). I suggest these because as an older practitioner I see signs of slipping from

the high standards upon which the profession was founded and to which it must return if it would survive. Think it over.

On the first day of February 1933 the Columbus Hospital, owing to the death of Dr. W. C. Brewer, closed its doors.

This hospital was built by Dr. J. E. Davis in 1896 and was one of the first private hospitals built in this portion of the state. It has been in continuous operation ever since it started until the death of Dr. Brewer necessitated its closing. Dr. Davis had with him at the time it was built Dr. R. C. Molloy who is still in active practice and Dr. Lou Crigler now of New York City. Dr. R. C. Molloy and Dr. Eli Station, who were associated with Dr. Brewer at the time of his death, will continue to keep their office in the hospital building.

Dr. J. R. Lavender formerly of Milport, Ala., has opened an office in the Dispatch Building and will engage in the general practice of medicine. Dr. Lavender has a pleasing personality and seems well equipped for his calling.

J. W. Lipscomb, County Editor.

Columbus,

February 7, 1933.

MADISON COUNTY.....	Still Missing
MARION COUNTY.....	Still Missing
MARSHALL COUNTY.....	Still Missing

MONROE COUNTY

I heard somehow that the gound hog saw his shadow and ran for his den, but was run over and killed by a passing Ford. If this be true, I presume we may expect open weather for the weeks lying out before us. We certainly need some good weather; for we have had an unusually bad winter and fall. Today it is wonderfully fine. In spite of the inclemency of the weather we have had but little sickness in our territory. A considerable number of people have had flu in a mild form, but very little pneumonia—consequently our doctors have not been hard worked. In my last letter I told you that Dr. Summerford's wife was in hospital here. I think she has entirely recovered. But it is with sorrow and regret that I am forced to chronicle the serious illness of Dr. R. S. Kirk of Amory. Dr. Kirk has practiced medicine longer than any man in our county. He moved to Amory from Alabama when Amory was first being built. He has done many years of faithful service to our people and has as many friends as any one who ever lived here. He has recently undergone a heavy operation and must undergo another. The outcome of these two-step operations is, of course, uncertain. But his many friends are anxiously hoping that he may come out in such shape that he may have many years of life ahead of him.

Our society, the Thirteen County Society—will hold its next meeting at Macon on the third Tuesday in March. Macon is at the extreme southern boundary of our territory. We have never gone there for one of our meetings. At our last meeting we decided to visit with the doctors on the border lines. We feel that the interest and co-operation will be better because of this fact. To the members of our society who were not at Aberdeen in December—we decided to go to the places where we have not gone before without waiting for invitations and it was unanimously decided that we would not expect any entertainment from the local doctors under such circumstances. Macon is a wonderfully fine old city. Much of Mississippi history centers in and around Macon. The culture and hospitality of its citizens are well known. The very fact that Dr. H. L. Minor lived, labored and died there is enough to give the place a prominence that few towns in the state can equal. Be sure to go to Macon in March—you will never regret it. Any doctor who has never seen the Thirteen County Society in "action" should not fail to be there. There will be a welcome and a treat in store for him. Then do not forget that our June meeting returns home—that is to Monroe county. As stated in my last the meeting will be at old Greenwood Springs. You will be both welcomed and entertained. It is easy of access (by automobile only). But at mid June both roads and weather should be at their best.

I have not seen the program for the Macon Meeting—but leave that to Jamie Acker. Of course he is the president of Mississippi State Association, but that is a secondary matter as compared to being secretary of our society. All praise to Jamie who is our inspiration.

G. S. Bryan, County Editor.

Amory

February 5, 1933.

MONTGOMERY COUNTY.....Still Missing
 NESHOBA COUNTY.....Missing
 NEWTON COUNTY.....Still Missing

NOXUBEE COUNTY

I am sending you herewith a few news items from Noxubee County. We have only eleven doctors in this county, hence it is not always possible to report anything of interest, but will do my best from this time forward.

We have recently gone through a mild epidemic of influenza, Drs. Hill, Salter, and Murphey having been victims of the malady.

Dr. C. C. Wright, Brooksville, has been in Birmingham, Ala., under treatment of Dr. Geddes for several weeks, and though he is at home again, is not able to resume his practice.

Dr. Eugene Johnson, Memphis, Tenn., was in

Macon recently and operated on both the mother and wife of Dr. L. B. Morris at the Macon Hospital.

The Northeast Mississippi Thirteen Counties Medical Society will meet in Macon on Tuesday, March 21, at 2 P. M. We shall be glad to have as many visiting doctors as can be present at that time.

E. M. Murphey, County Editor.

Macon,

February 6, 1933.

OKT IBBEHA COUNTY.....Still Missing
 PINOLA COUNTY.....Still Missing

PEARL RIVER COUNTY

Our wave of influenza has about passed. During the time it was so prevalent we had several deaths from pneumonia as a complication. The weather here has been very conducive to "flu" and pneumonia.

Our physicians have much more work to do and much less remuneration is being received for same. It seems that somebody must get along without the services of a physician unless our physicians call upon the Reconstruction Finance Corporation for relief. It is well that we have not had any serious outbreaks of disease.

The county health department has been very busily occupied during the past several weeks with examinations of school children, promoting the building of better dairies, etc. Several school children have been found who had serious physical defects. In most cases we have been able to secure corrections where it was so necessary. A number of grade "A" dairies have been established recently. We now have a good market in New Orleans for all the grade "A" pasteurized milk that our dairy industry puts out. This is beneficial to our dairymen and insures a safe supply of milk for all who use it. The Pearl River County Health Department exercises close supervision over the production and handling of this milk.

There is very little of much importance to report this month. We are looking forward to spring time and the corner around which is some signs of prosperity.

G. E. Godman, County Editor.

Poplarville,

February 8, 1933.

PERRY COUNTY.....Still Missing

PIKE COUNTY

On February 4, Dr. P. L. Querens, Professor of Preventive Medicine of the Post Graduate School of Tulane, with his post graduate class, visited the Pike County Health Department headquarters here for a study of the department's program of activity. The following men were present: Dr.

G. C. Terrell, Prentiss; Dr. W. G. Depp, Summer Shade, Kentucky; Dr. L. L. McDougal, Sr., Booneville; Dr. J. B. Thigpen, Bay Springs; Dr. W. N. Jenkins, Port Gibson; Dr. A. J. Fortinberry, McComb; Dr. P. L. Querens, New Orleans; Dr. J. E. Ellis, West Point; Dr. D. T. Brock, McComb; Dr. H. F. Tatum, Meridian; Dr. S. P. Klotz, McComb; and Dr. G. W. Robertson, Magnolia.

The program started with a talk by Dr. Boswell outlining the diagnosis and treatment of tuberculosis. Dr. Boswell demonstrated his method of making a physical examination for tuberculosis. Following Dr. Boswell's lecture, the group had lunch. At 2:00 o'clock the program was resumed by an outline of the work of the health department by Dr. T. Paul Haney, Jr. He demonstrated some tuberculin tests and Schick test reactions. Following this, Miss Driskell outlined the nursing program of the department. Dr. Kamper then portrayed the work of the department in food and milk control. This was followed by an outline of the dental hygienist's work by Miss Kimmons. After this, Mr. Murphy outlined the program of general sanitation. The physicians were then shown the offices, equipment and records of the department, after which they visited a tuberculosis cottage occupied by a tuberculosis patient. After this trip they visited a grade "A" dairy which completed the program for the day. The physicians seemed to enjoy the day very much and expressed many gratifying remarks about the work. It was indeed a pleasure to have them with us.

Dr. Boswell held a tuberculosis clinic in Pike County February 2, 3, and 4, at which he examined 54 patients. The patients examined by his were mostly patients who had previously had tuberculin positive reactions. The tuberculin test was done only on tuberculosis familial contacts. Of the 54 patients examined by Dr. Boswell 18 were found to have active tuberculosis. Of the 54 examined, approximately 12 were patients referred by family physicians for examination and had not had tuberculin tests made upon them. Of these cases, six were found by Dr. Boswell there is now on record in the health department 64 known, active cases of tuberculosis in Pike County. These cases will be taken care of either by use of a tuberculosis cottage, screened porch, or sanatorium. All treatment of these cases will be under the direction of the family physician.

Dr. Boswell plans to repeat these chest clinics in Pike County at intervals of not less than three months. On February 2, Dr. Boswell addressed the Pike County Medical Society on the subject "Diagnosis and Treatment of Tuberculosis."

T. Paul Haney, Jr., County Editor.

McComb,
February 8, 1933.

PONTOTOC COUNTY

Dr. W. R. Card, Houlika, R. F. D., recently moved to Cockrum.

The many friends of Dr. E. G. Abernathy, Algoma, sympathize with him in the death of his brother, Mr. W. R. Abernathy, which occurred at Pontotoc, February 6.

Dr. C. D. Mitchell of the State Insane Hospital, Jackson, was visiting friends in Pontotoc one day last week.

The temperature is hovering eight above here this morning and the ground is covered with snow. Too cold to gather news. Will see you later.

R. P. Donldson, County Editor.

Pontotoc,
February 8, 1933.

PRENTISS COUNTY

Drs. S. L. Pharr, R. B. Caldwell, and R. B. Cunningham have been on the sick list during the past month.

Dr. and Mrs. H. B. Sutherland were called to Memphis last week on account of the illness and death of Mrs. Sutherland's brother-in-law.

R. B. Cunningham, County Editor.

Booneville,
February 7, 1933.

QUITMAN COUNTY

We are sorry to lose Dr. H. B. Oliver who has moved from Sledge to Duck Hill.

Our county health officer, Dr. A. C. Covington, reports 600 inoculations of toxoid in the schools of the county during December and January. Only one case each of typhoid and diphtheria have been reported during the winter.

If any of the doctors in the county have any news to report I shall be glad to hear from them.

Eric A. McVey, County Editor.

Lambert,
February, 9, 1933.

RANKIN COUNTY.....	Still Missing
SCOTT COUNTY.....	Still Missing
SHARKEY COUNTY.....	Missing

SIMPSON COUNTY

Dr. E. S. Calhoun, Mt. Olive, was in Magee to see patients he had placed in the Magee General Hospital.

Dr. and Mrs. E. L. Walker, Magee, are visiting friends and relatives in Arkansas and Louisiana this week.

The flu epidemic throughout this county has been rather light, but complications have been more serious than usual. However, all sections report that influenza has subsided.

Several of the doctors of Sanatorium and Magee

are planning to attend the Mid-South Post Graduate Medical Assembly in Memphis.

The most interesting and enthusiastic meeting of the physicians of Simpson County was held January 17 at the Magee General Hospital to discuss the advisability of a free maternity clinic for indigent mothers. After a general discussion participated in by all present a unanimous vote was given to establish a maternity center in the county. A one hundred per cent attendance of all active physicians was unusual, several coming from a distance of twenty miles. Greatest interest was manifested in the project.

Mrs. Lafayette Birdsong, field representative of the Mississippi State Maternity Association, presented the project and plans in full detail. Those attending and taking part in the discussion were: Dr. and Mrs. Johnson, Braxton; Dr. and Mrs. Knight, Mendenhall; Dr. R. E. Giles, Mendenhall; Drs. White and Kennedy, Pinola; Dr. and Mrs. W. W. Diamond, Drs. M. O. Currie, A. E. Kennedy, M. M. Magee and E. L. Walker, Magee.

E. L. Walker, County Editor.

Magee,
February 8, 1933.

SMITH COUNTY.....	Still Missing
STONE COUNTY.....	Still Missing
SUNFLOWER COUNTY.....	Still Missing

TALLAHATCHIE COUNTY

Haven't forgotten you but there is so little activity worth reporting about the doctors of my county.

Drs. J. G. Backstrom, Tutwiler, and J. D. Biles, Jr., Sumner, will leave in the morning for the meeting of the Mid-South Post Graduate Medical Society at Memphis. They will return Wednesday evening and I shall go up Thursday morning.

Dr. A. C. Harrison, Charleston was indisposed most of January due to flu-cold. His brother Dr. T. B. Harrison, has retired from active practice of medicine all together.

Glad that Dr. C. F. Freeland is giving whole time to practice again. Regret his loss of farming interest. It was best for the doctor and his clientele.

As a whole, all doctors have plenty of time for golfing and gardening. Alarmingly healthy now.

Dr. John A. Harris, Webb, went to hills for nice bird hunt with friends just before hunting law was out.

T. F. Clay, County Editor.

Tutwiler,
February 13, 1933.

TALLAHATCHIE COUNTY

A number of physicians enjoyed a bird supper given by Dr. J. B. Biles of Sumner. The doctor has a beautiful home and entertained in great

style. There were doctors present from Charleston, Greenwood, Clarksdale, Tutwiler and Web.

Dr. J. W. Moody attended the Council Meeting of Boy Scouts of the Delta which convened at the Alcazar Hotel in Clarksdale.

Dr. D. G. Bardwell of Charleston is confined to his home suffering with renal colic.

J. W. Moody.

Charleston,
February 9, 1933.

TATE COUNTY.....	Still Missing
TIPPAH COUNTY.....	Still Missing
TISHOMINGO COUNTY.....	Still Missing
TUNICA COUNTY.....	Still Missing
UNION COUNTY.....	Still Missing
WALTHALL COUNTY.....	Still Missing

WARREN COUNTY

Warren County mourns the loss of two of its medical men, Dr. John E. Quidor and Dr. Mace H. Bell. Dr. Quidor, who died on January 5, was in government employ under the Civil Service Department. Dr. Bell, who passed away on February 1, limited his practice to diseases of the eye and lived in Vicksburg for a number of years.

Dr. Paul Jackson, Liberty, was a guest in this city over the week end. Dr. Jackson visited his two old college chums, Dr. H. B. Goodman and Dr. N. B. Lewis.

Dr. Guy Sanderson of this city made an extensive trip to Chicago this month. It is stated that the trip was distinctly for pleasure.

A number of our doctors have returned to normal again with the close of the hunting season. During season Drs. Birchett, Jr., Clark, Herring and Podesta were responsible for many a blown shell. As to the results no report was ever made.

We see by the daily papers that one of our young doctors, Dr. Walter Johnson, has joined the organization of Y's Men in the city. This is a club of young business and professional men.

The city doctors are looking forward to the presentation of a talking picture put out by Eli Lilly & Company on the production of insulin.

Dr. Hugh Johnston of this city has just finished his fellowship at the Mayo Clinic and will return to Vicksburg as his permanent residence sometime in March.

Dr. Felix J. Underwood and Dr. Ricks of the State Board of Health were both visitors in Vicksburg during the first part of the month.

Nathan B. Lewis, County Editor.

Vicksburg,
February 15, 1933.

WASHINGTON COUNTY

Dr. F. M. Acree left last Thursday for Montreal, Canada, where he will attend the annual meeting

of the American College of Physicians. Dr. Acree was inducted into the College two years ago at Baltimore, Md.

Dr. H. A. Gamble is visiting his son Lyne, who is a student at Davidson College, Davidson, N. C.

Dr. T. F. Willson, Arcola, has been able to leave the hospital and is convalescing rapidly at his home.

Dr. Aristed from the Chicago office of the American Medical Association on his inspection tour of hospitals visited the King's Daughters' Hospital at Greenville, and spoke very complimentary of the equipment and the management of the hospital.

Greenville, John G. Archer.
February 8, 1933.

WAYNE COUNTY.....Still Missing

WEBSTER COUNTY

The doctors in our county have been pretty busy for some time due to a light form of influenza.

We have had quite an unusual number of hospital cases of late. Since we have no hospital in our county it is an increased burden on the doctors to arrange for hospitalization for a number of these cases for they are often charity patients.

The very meager amount donated by the recent legislature to the hospitals near us for the indigent sick, is inadequate to take care of even the emergency cases.

We are for abolishing our state charity hospitals and have a more uniform distribution of hospital accommodations so that the added expense and physical risk in getting these emergency cases to and from the hospitals can be reduced to the minimum.

W. H. Curry, County Editor.

Eupora,
February 7, 1933.

WILKINSON COUNTY

Miss Viola Kent, a graduate of Field Memorial Hospital, has accepted a position with Drs. Sebastian and Ratcliffe at Ferriday, La.

Dr. S. E. Field and family spent a few days last week in the north and central part of the State.

Dr. R. J. Field will leave this week for Chicago to attend the meeting of the Council on Medical Education and Hospitals of the American Medical Association and the meeting of State Hospital Association presidents and secretaries with the officers of the American Hospital Association. Dr. Field who is president-elect of the Mississippi State Hospital Association is the representative of that organization.

S. E. Field, County Editor.

Centreville,
February 8, 1933.

WINSTON COUNTY

Drs. L. T. Parks and C. A. Kirk were in the city this week on business from Fearn Springs neighborhood.

Dr. T. C. Suttle of Beth Eden neighborhood was in the city this week.

Dr. W. B. Hickman was in Meridian on business recently.

Dr. E. L. Richardson, the county health officer, is doing some good work on sanitary cesspools throughout the city and surrounding neighborhood.

We are just wondering when the services of doctors will be regarded as a necessity and will be considered when the seed loan takes over all the cotton in our county. Fertilizer, seed, etc., are considered, but our service has been practically free for the last two year. Of course, we don't need any money and should not be contentious at all. The government, according to reports from the committee, had a prior lien on 82 per cent of the cotton last year, hence, collections from the farmers were nil.

The Winston County Medical Fraternity meets the second Tuesday in each month at 5 P. M. We always welcome visitors from the profession when possible for them to attend.

M. L. Montgomery, County Editor.
Louisville,
February 6, 1933.

YALOBUSHA COUNTY.....Still Missing

YAZOO COUNTY.....Still Missing

WOMAN'S AUXILIARY TO THE MISSISSIPPI STATE MEDICAL ASSOCIATION

President, Mrs. W. C. Pool, Cary
President-Elect, Mrs. M. L. Van Alstine,
Jackson
State Convention—Jackson, May 9, 10, 11, 1933.

Chairman Press and Publicity, Mrs. Leon S.
Lippincott,

A MESSAGE FROM OUR PRESIDENT

Another year is almost past and I wish to call your attention to dues. Those of you who have not paid your dues, please do so. We are very anxious to have our membership paid up on time, so as to get full credit at the national meeting at Milwaukee, Wisconsin, June 12-16, 1933. To do this all dues must be in the hands of our state treasurer, Mrs. E. C. Parker, East Beach, Gulfport, not later than the month of March. I am depending on your continued loyalty and support and feel that each one will co-operate.

The annual state meeting is May 9, 10, 11. Do not forget it! I know it will be impossible for each member to be there, but, I hope as many

will attend as can, for the chairman, Mrs. James Acker, Jr., and her co-workers are planning an interesting program.

The president of the Woman's Auxiliary to the Southern Medical Society, Mrs. Arthur A. Herold, Shreveport, Louisiana, has accepted an invitation to be with us. Dr. G. S. Bryan, Amory, has promised one of his interesting and entertaining talks. Also, there is a possibility of the national president, Mrs. James F. Percy, Los Angeles, California, being with us. Now isn't that a splendid "line up?" With this, together with our interesting reports from each auxiliary, routine business and the social functions always provided by the hospitable hostess, Hinds County Auxiliary, I know we are going to thoroughly enjoy our stay in Jackson.

Again I ask the membership committees to become very active with the membership drive so as to try and show good increase in our membership.

Mississippi has been especially commended by our national president for the gain in auxiliaries this year. I trust when we make our annual report to the president, she will be able to say, Mississippi, despite conditions, has been going forward with the auxiliary work. It has been the loyalty of the physicians' wives, and the cooperation of the physicians themselves, that has enabled us to make the gain this year. I assure each one of you that I wish I could thank you personally, but as that is not possible, I will say here, with all sincerity and gratitude, I THANK YOU.

REMEMBER, the annual meeting is near. May 9, 10 and 11. Reports must be prepared, so begin to arrange your plans accordingly.

Best wishes and regards.

Mrs. W. C. Pool.

Cary,

The January News Letter from our National Press and Publicity Chairman give us an interesting biographical and personality sketch of our new national president, "thrust into the multitudinous responsibilities and perplexing problems of an office for which she did not have the preparation provided for a regular president-elect".

OUR PRESIDENT—MRS. JAMES F. PERCY

Mrs. Percy was born in Nebraska, went with parents to Southern California when five years of age and received her education in the public schools of Los Angeles. Her early activities were concerned with the development of oil interests in which her father was engaged. Part of this experience required familiarizing herself with the legal side of business practice, she lived thus in a business and legal atmosphere. She became an active worker in women's organizations especially those devoted to music and the drama. In both of these pursuits she has maintained an earnest and enthusiastic interest until the present day.

Since her marriage to Doctor Percy in 1925 she entered with equal devotion into the exacting demands that usually fall to the lot of the physician's wife. Through friendship and admiration for Mrs. John C. Reynolds, of Dallas, Texas, she was attracted to the Woman's Auxiliary of the American Medical Association. Following the A. M. A. meeting at Dallas she resolved to try to interest the Los Angeles County Medical Association in the formation of a County Auxiliary. This resulted in her being requested to assume chairmanship of an organization committee. Her first efforts met with enthusiastic support. She was elected its first president and at the end of the first year there was an enrolled membership of 474. In May, 1930, she was elected state president and at the Detroit meeting of the Auxiliary to the A. M. A., was made fourth vice-president. This was followed at Philadelphia by the second vice-presidency and at New Orleans she was made first vice-president. Because of her admiration and friendship for our late president, Mrs. Walter Jackson Freeman, and in loyalty to the Auxiliary this office was reluctantly accepted.

Mrs. Percy has a constructive love for organization work which she keenly enjoys.

Mrs. Horace J. Whitacre, 3803 North Monroe Street, Tacoma, Washington, has been elected national first vice-president and ex-officio chairman of organization, filling the office left vacant by the advancement of Mrs. Percy to the presidency.

Says Mrs. Percy: "It is a great asset to the National Auxiliary to have Mrs. Whitacre become again a member of the National Board. She has given a remarkable demonstration of her executive ability in the organization of her own state auxiliary and as its first president. She received merited recognition during the New Orleans convention. She brings to her office charm, wisdom and a rich experience from which we shall reap the benefits".

Notes from Colorado give those auxiliaries who do not quite know what to do an idea how to carry on.

"In response to the tremendous demand on the Red Cross for articles for the needy, the philanthropic chairman, Mrs. George W. Miel, has taken garments to be made under the name of the Denver County Auxiliary and beginning the first of the year, members interested will work with her every Friday afternoon at her home."

The Auxiliary in Nashville is fortunate in being able to draw on the faculty of Vanderbilt University for able speakers on the programs. Recently Dr. Frank Luton, assistant professor of psychiatry in

the medical school, spoke to the Auxiliary on "Child Training and Mental Conditioning in Childhood". More and more it is evident that a knowledge of mental hygiene is taking its place in health education programs.

Why not mental hygiene, for a child cannot have perfect health and normal growth if not properly trained in mental hygiene. None of us know enough about it. A splendid suggestion for the coming year!

The Delaware Auxiliary has an editorial on "Take this Journal Home to Your Wife". And we might add, ask her to take the time to read it.

Food for thought from Virginia.

"No matter how efficient and faithful your officers or how excellent your program, the success of the Auxiliary depends on the work and support of the individual members".

Other suggestions:

"First—Attend the meetings regularly. If you cannot write a paper or make a speech, be an appreciative listener. Your presence will encourage the president.

"Second—If possible accept cheerfully the work assigned you and always be willing to do your part.

"Third—Answer letters promptly. Often a post card is all that is necessary and should be written at once. Nothing delays the work or is more annoying to a busy officer than to have to wait for days for a reply.

"Fourth—Make constructive, not destructive, criticisms—the former are always welcome.

'A good thing to remember and a better thing to do—

Is to belong to the construction gang and not the wrecking crew' "

"The Doctors' Wives Club of Council Bluffs has been following the scheduled monthly luncheon with sewing for the Red Cross."

THE HOMOCHITTO VALLEY MEDICAL SOCIETY AUXILIARY

The Momochitto Valley Medical Society Auxiliary met on the second Thursday in January at the Eola Hotel, 1 o'clock, P. M., Natchez, with thirteen members, including the two new members, present.

After a delicious four-course luncheon the meeting was called to order by the president, Mrs. E. C. Mullins of Bude. The minutes of the last meeting were read and approved. A very interesting program followed.

Plans for a joint meeting for luncheon with the members of the Homochitto Valley Medical Society were discussed with the date set for the second Thursday in April.

Mrs. R. D. Sessions, one of our valued members, is quite ill at the Natchez Sanatorium and we all wish for her a speedy recovery.

MRS. H. M. SMITH,
Press and Publicity Chairman.

Natchez,

January 30, 1933.

AUXILIARY TO THE HINDS COUNTY MEDICAL SOCIETY

Mrs. F. L. Van Alstine, president-elect of the Women's Auxiliary to the Mississippi State Medical Association, recently entertained the Women's Auxiliary to the Hinds County Medical Society at a plate luncheon in her home, 727 Gillespie Place, in compliment to two brides, Mrs. Brister Ware and Mrs. Temple Ainsworth.

"The handsomely appointed table had as decorations jonquils, spirea and other spring flowers in white and gold lighted by tall green tapers in silver candlesticks, and a delectable menu was thoroughly enjoyed by the congenial group. The living room was also beautifully decorated in these heralds of spring artistically arranged in vases and bowls.

"Following the luncheon, Mrs. A. G. Wilde called the meeting to order and an offering was made to be used at the Preventorium, the fund being in charge of Mrs. Harley R. Shands. Dr. Felix J. Underwood spoke on "Public Treands in Public Health."

"Members of this congenial group with Mrs. Van Alstine and the two honorees, Mrs. Ware and Mrs. Ainsworth, and the speaker, Dr. Underwood, included Mrs. Harley R. Shands, Mrs. H. F. Garrison, Mrs. A. G. Wilde, Mrs. W. S. Sims, Mrs. H. C. Sheffield, Mrs. J. P. Wall, Mrs. R. R. Halfacre, Mrs. R. R. Welch, Mrs. D. W. Jones, Mrs. A. E. Gordin, Mrs. E. C. MacKinzie, Mrs. W. B. Dobson, Mrs. Robin Harris, Mrs. J. W. Barksdale, Mrs. Felix J. Underwood, Mrs. T. W. Kemmerer, Mrs. J. A. Milne, Mrs. Samuel H. McLean, Mrs. H. F. Magee, Mrs. John Walker, Mrs. F. E. Rehfeldt, Mrs. H. C. Ricks, Mrs. Ware, Mrs. J. H. Fox, Mrs. Huggins, Mrs. W. L. Hughes and Mrs. Lawrence W. Long."

Miss Aimee Shands, attractive and popular daughter of Dr. and Mrs. Harley Shands, left last week for a visit of three weeks with relatives and friends in Chicago, Rochester and New York City.

Dr. and Mrs. Lauch Hughes returned this week from an extended trip through the East and middle West. During their vacation they visited Mrs. Hughes' home in Virginia and many points of interest.

On January 27, the Maternity Center of Jackson held its first anniversary celebration. Dr. Percy Wall who has been a member of the executive board of the Maternity Center since its infancy and

Dr. W. E. Noblin, who has been one of the guiding hands of its progress, reviewed some of its accomplishments with which they were familiar and urged enthusiastic support of the Center program.

Mrs. W. L. Hughes,
Press and Publicity Chairman.

Jackson,
February 10, 1933.

WOMAN'S AUXILIARY TO THE HARRISON- STONE-HANCOCK COUNTIES MEDICAL SOCIETY

The February meeting of the Medical Auxiliary was held in the home of Mrs. Dan J. Williams on Wednesday, February 1, with Dr. Emma Gay as co-hostess. Despite a downpour of rain twelve members and a guest were present.

The report of the treasurer showed that \$80.50 had been expended on redecorating the interior of the King's Daughters' Hospital at Gulfport the past few months. The organization had taken the plans are under way for staging a benefit improject as its intensive work for the year and mediately following Lent, to purchase dishes.

Mrs. J. A. Devitt, chairman on revision of By-laws to conform to those of the State, read them as suggested by her committee. These were adopted.

The Williams home was decorated with a profusion of camellias from their garden, and a pleasing feature of the occasion was a presentation to each guest of a potted japonica which had been grown by Dr. Williams from seed in the garden. Those in attendance were: Mrs. Geo. Melvin, president, Mrs. J. S. Laird, vice-president, Mrs. Elmer Gay, treasurer and secretary, Mrs. Cummings McCall, Mrs. C. A. Sheely, Mrs. W. E. Mannie, Mrs. R. E. Longino, Mrs. J. A. McDevitt, Mrs. C. H. Denser, Dr. Emma Gay, Mrs. Dan Williams, and a charming guest, Mrs. Ed Hail of Montgomery, Alabama.

Since our last report the lovely young daughter of Dr. and Mrs. C. A. Sheely, Miss Eleanor, was married to P. D. Greaves, a promising young lawyer, and are making their home at the Markham Hotel.

The Medical Auxiliary is happy to claim Mrs. Donald Rafferty, who is making a splendid record in her office as state president of the Garden Clubs of Mississippi.

Mrs. D. J. Williams,
Press and Publicity Chairman.

Gulfport,
February 6, 1933.

WOMAN'S AUXILIARY TO THE ISSAQUENA- SHARKEY-WARREN COUNTIES MEDICAL SOCIETY

The January meeting of the Issaquena-Sharkey-Warren Counties Medical Society Auxiliary was held in the Coral Room of the Hotel Vicksburg with 19 members present. In accordance with the pleasant custom, the meeting began promptly at noon with a lovely luncheon.

Mrs. Sidney Johnston, newly elected president, very graciously presided.

Mrs. Richard Street gave a number of beautiful vocal selections which were thoroughly enjoyed by all.

Mrs. Johnston then presented the guest speaker, Dr. Felix J. Underwood, who is so well known and appreciated by members of the Auxiliary. He gave a most interesting and instructive address on the subject of "Public Health."

Mrs. George Street has as her guest a niece, Miss Evelyn Towers, of Rome, Georgia, who is very popular with the younger set.

Mrs. Hugh Johnston and little daughter, Martha Anne, who have been in Rochester, Minnesota, with Dr. Johnston, a fellow in the Mayo Clinic, have returned home. Dr. Johnston will complete his three-year course at the Clinic in March and will then join his family here.

Mrs. Benson Martin has her mother, Mrs. Cooper, and her sister, Mrs. Johnson, with her for the remainder of the winter. They have visited here before and their friends are always pleased to welcome them back.

Mrs. Ewing F. Howard attended the meeting of the Council of Church Women, as delegate, in Greenville. She was impressed with the hospitality of the ladies there and reports a most successful meeting in every way.

Mrs. W. H. Parsons, with her two little daughters, motored to Jackson to spend the past week-end with her family there.

The ladies of the Auxiliary deeply sympathize with Mrs. Mace H. Bell in her recent bereavement she has sustained in the death of her husband, Dr. Mace H. Bell. The members feel a personal loss in the passing of this highly esteemed doctor and friend.

Mrs. L. J. Clark,
Press and Publicity Chairman.

Vicksburg,
February 10, 1933.

HONOR ROLL

COUNTY EDITORS: W. A. Johns; William F. Hand; S. B. McIlwain; Jos. E. Green; A. M. McCarthy; W. B. Dickins; J. W. Lipscomb; G. S. Bryan; E. M. Murphey; G. E. Godman; T. Paul Haney, Jr.; R. P. Donaldson; R. B. Cunningham;

Eric A. McVey; E. L. Walker; T. F. Clay; W. H. Curry; S. E. Field; N. B. Lewis; M. L. Montgomery.—20.

COUNTY SOCIETIES: Central, Robin Harris; Delta, John G. Archer; East Mississippi, T. L. Bennett; Harrison-Stone-Hancock, George F. Carroll; Homochitto Valley, L. Wallin; Pike County, T. Paul Haney, Jr.; South Mississippi, J. P. Culpepper, Jr.; Issaquena-Sharkey-Warren.—8.

HOSPITALS.—Field Memorial Hospital, S. E. Field; King's Daughters' Hospital, Greenville, John G. Archer; Mississippi Baptist Hospital, Lawrence Long; Matty Hersee Hospital, G. Lamar Arrington; Northeast Mississippi Hospital, R. B.

Cunningham; Vicksburg Infirmary, N. B. Lewis; Vicksburg Sanitarium.—7.

WOMEN'S AUXILIARY.—Mrs. L. S. Lippincott; Mrs. W. C. Pool; Mrs. H. M. Smith; Mrs. W. L. Hughes; Mrs. D. J. Williams; Mrs. L. J. Clark.—6.

OTHERS.—E. F. Howard; F. J. Underwood; D. W. Jones; J. D. Gardner; James C. Rice; R. J. Field; F. B. Long; A. M. McCarthy; Mrs. S. Kemp; F. L. McGahey; J. W. Moody; John G. Archer; G. C. Jarratt; E. T. White; S. W. Johnston.—15.

TOTAL.—56.

YOUR EDITORS THANK YOU.

BOOK REVIEWS

The Sputum, Its Examination and Clinical Significance: By Randall Clifford, M. D., New York, The MacMillan Company. 1932. pp. 167. Price, \$4.00.

The book belongs to the series of MacMillan Medical Monographs. It is small, compactly bound, and printed in large, easily readable type.

It includes chapters on the collection and disposal of specimens, sterilization, and the gross and microscopic characteristics, as well as the chemical examination, of the sputum. The technic for the gram eosin and Fontana stains is included, as well as a description of most of the modifications of the Ziehl-Neelson technic.

The latter portion is devoted entirely to a description of the gross and microscopic appearance of the sputum in various diseases of the lungs and bronchi. In addition to those usually considered in most laboratory manuals, it includes a description of the microscopic appearance of the sputum in pulmonary asbestosis, with which most laboratories are entirely unfamiliar and of which a description is found in but very few articles which have been written concerning this subject.

The value of the book is limited however, by the fact that so little of clinical and diagnostic value is known concerning the sputum that the subject is usually thoroughly covered in a good laboratory manual, even if not in quite as much detail as in the volume considered.

The reading matter is interesting and the author presents his subject well, but he is restrained by its limits.

E. P. Thomas, M. D.

Textbook of Medicine: By J. J. Conybeare, M. C., M. D. Oxon., F. R. C. P. 2nd ed. New York, William Wood and Company. 1932. pp. 1004. Price, \$7.50.

This second edition presents no change in character or scope from the previous edition. There

are four additional contributors bringing the total to fourteen. There are short sections on dermatology, pediatrics, tropical medicine and, as customary in English texts on medicine, a very long section on diseases of the nervous system. Many of the subjects in general medicine that ordinarily are given considerable space are presented in only a sketchy fashion. Statistical studies are rarely presented.

Though larger than the previous edition the cost has been reduced. Possibly the book is worth while for the general practitioner but by comparison with standard texts edited in this country it is very poor.

J. C. Earton, M. D.

Varicose Veins: By H. O. McPheeters, M. D., F. A. C. S. 3rd rev. and enl. ed. Philadelphia, F. A. Davis Co. 1931. pp. 285. Price, \$4.00

This is an excellent treatise which covers the subject in a very complete and thorough manner. Anyone interested in the treatment of varicose veins would read this book. It is well written, illustrations are excellent and it is presented in a clear, concise and readable manner. The author not only gives his own personal experience, which is extensive, but quotes from the work of others.

Shirley C. Lyon, M. D.

Radiologic Maxims: By Harold Swanberg, B. Sc., M. D., F. A. C. P. Quincy, Ill., Radiological Review Pub. Co. 1932. pp. 127.

This valuable little book contains many valuable maxims which can be used to advantage by members of the general and specialized medical profession.

Some of the world's best known surgeons are quoted as expressing their appreciation of the value of the roentgen ray. Among them are Dr. Rudolph Matas, of New Orleans, Lord Berkeley Moynihan,

M. D., of England, Dr. William J. Mayo, of the Mayo Clinic, and others.

Dr. Matas is quoted as follows: "The roentgenologist is to-day, next to the surgeon, the foremost exponent of the anatomy, physiology and pathology of the living organism, which so profoundly differentiates the practice of medicine of the present from that of the past. Almost with every flash of his radiant tube, he performs a biopsy, a painless vivisection which penetrates further than any dissection and, by what it reveals, often prevents a necropsy."

The maxims compiled in this book were first presented to the medical profession by the "Radiological Review," a monthly journal. This book contains 127 pages without illustrations. It is divided into three general parts: Part 1 contains maxims and quotations on general radiology; Part 2 consists of maxims and quotations on roentgen diagnosis, and Part 3 maxims and quotations on radiation therapy, divided into: (A) general, (B) roentgen therapy, (C) radium therapy, and (D) spectral radiation other than X-ray and radium.

Leonville J. Menville, M. D.

Synopsis of Gynecology: By H. S. Crossen, M. D..

F. A. C. S. and Robert James Crossen, M. D.
St. Louis, C. V. Mosby Co. 1932. pp. 227.
Price, \$2.75.

This handy volume is a welcomed edition to the gynecological text-books, and I believe it will meet with distinct approval among the rank and file of gynecological students everywhere. The book is up-to-date, concise, and covers the field as thoroughly as possible for a book of 220 pages. The chapter on endocrine glands in relation to gynecology is brief but comprehensive.

Peter Graffagnino, M. D.

Diseases of the Blood: By A. Piney, M. D., Ch. B.,

M. R. C. P., M. R. C. S. 2nd ed. Philadelphia,
P. Blakiston's Sons & Co. Inc. 1932. pp.
310. Price, \$4.00

This book should serve as a guide to the fundamentals of hematology. The chapters dealing with the normal and abnormal appearance of the formed elements of the blood gives one a practical working knowledge of the subject with a minimal amount of effort. Throughout the entire book there is a conspicuous absence of theoretical detail that might be time consuming and confusing.

The classification of anemias is rather dogmatic and leads one to a sense of false security. They are considered in a semi-tabulated form but essential clinical facts are not omitted. This presentation is time saving but additional details might well be incorporated.

D. O. WRIGHT, M. D.

Minor Surgery: By Frederick Christopher, M. D.,

F. A. C. S., 2nd ed. Philadelphia, W. B. Saunders, 1932. pp. 998. Price, \$10.00.

The need for a text book on minor surgery was satisfied by Christopher's first edition, but this more detailed second one should impress upon the student of surgery the necessity of mastering minor surgery before one can become a finished general surgeon. To this fairly complete and very compact review of the current literature are supplemented the author's sound criticisms and suggestions based on a wide practical experience. He has made it interesting and thus it is more than a mere reference book for students, internes and practitioners, and should serve to add prestige to the not too well emphasized elementary branch of surgery. It is particularly recommended to the student of surgery, but most widely experienced practitioners and teachers of surgery will find it of real value and will want to read it from cover to cover.

AMOS M. GRAVES, M. D.

PUBLICATIONS RECEIVED

F. A. Davis Company, Philadelphia: Food in Health and Disease, by Katherine Mitchell Thoma. B. A. Procedures in Tuberculosis Control, by Benjamin Goldberg, M. D. F. A. C. P., F. A. P. H. A.

J. B. Lippincott, Philadelphia: Diseases of the Eye, by H. E. Fuchs.

Lea & Febiger, Philadelphia: Asthma, Hay Fever and Related Disorders, by Samuel M. Feinberg, M. D. F. A. C. P. Calcium Metabolism and Calcium Therapy, by Abraham Cantarow, M. D.

The Macmillan Company, New York: Textbook of Materia Medica and Therapeutics, by Sister Alma.

The University of Chicago Press, Chicago: The Fundamentals of Good Medical Care, by Roger I. Lee, M. D., and Lewis Webster Jones, Ph. D. Surveys of The Medical Facilities in Three Representative Southern Counties, by C. St. C. Guild, M. D., Ph. D. Organized Medical Service at Fort Benning, Georgia, by I. S. Falk, Ph. D. The Income of Physicians, by Maurice Leven, Ph. D.

Paul B. Hoeber, Inc., New York: The Pelvis in Obstetrics, by Julius Jarcho, M. D., F. A. C. S.

W. B. Saunders Company, Philadelphia: The Surgical Clinics of North America, Volume 13, Number 1.

W. W. Norton & Company, New York: The Tides of Life, by R. G. Hoskins, Ph. D. M. D.

G. Doin & Co., Paris: Les Sequelles de L'Encephalite Epidemique, by Georges Guillain, and Pierre Mollaret. L'Interferometrie en Clinique, by A. Durupt.

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THE TREATMENT OF CARDIAC AND RENAL EDEMA*

JAMES G. CARR, M. D.

CHICAGO, ILL.

A consideration of the treatment of edema may well be introduced by a short consideration of its pathogenesis. Edema, especially the edema of nephritis, has been the subject of extensive investigation in recent years. The theories of its origin in cardiac failure have simultaneously undergone some change, less violent, yet significant and not to be ignored in the clinical management of the condition.

Eyster defines cardiac decompensation thus: "The condition in which the venous load has exceeded the capacity of the heart to respond by increased work, and in which the heart is failing to move the blood adequately from the venous side into the arteries, we call cardiac decompensation or cardiac failure"; and adds in explanation of the results of cardiac insufficiency: "The high venous pressure that accompanies cardiac incompetence is directly responsible for most of the signs and symptoms of this clinical state. Congestion of the lungs, liver, spleen and other organs; diminished vital capacity of the lungs; and diminished secretion of urine and retention of water are the result of venous and capillary engorgement and stasis."

The mechanism of the production of cardiac edema is undetermined in spite of extensive study and discussion. One of the clearest and most satisfactory statements in the literature is that of McLean: "The osmotic pressure of the

plasma proteins is within normal limits. Increase in capillary pressure to an extent sufficient to overbalance the osmotic pressure of the proteins would account for the edema and indeed this now seems to be the most likely explanation. Whether an additional factor is needed, such as increased capillary permeability to proteins, due to asphyxia, as is assumed by Starling, is not yet clear." Hoff explains the formation of edema in practically the same way. Yet the clarity of the statement just quoted does not permit us to omit mention of other important theories of edema formation.

Reference has just been made to the question of increased capillary permeability, the result of alterations in the capillary wall. This perversion of capillary function may be partly due to the increased tension to which the walls of the capillaries are subjected, but it is likely that other factors are effective in promoting the escape of fluid into the tissues. Passive congestion implies some degree of anoxemia due to imperfect pulmonary function. Oxygenation of the blood is impeded by sluggish circulation through the lung, and the disuse of pulmonary tissue consequent upon some rigidity of the bases and an indeterminate quantity of secretion within the finer respiratory passages. This anoxemia may impair the function of the capillary epithelium and add to the injury simultaneously imposed by interference with normal tissue oxidation, with production of toxic waste products.

To the factors mentioned, one more of importance must be added, the renal failure which is so constant an accompaniment of cardiac insufficiency. Saxl and Erlsbacher state that, "Richards and Plant showed in rabbits that with constant velocity of the current, the quantity

*Read before the Section on Medicine at the Sixty-fifth Annual Session of the Mississippi State Medical Association, Jackson, April 14, 1932.

of the urine is a linear function of the blood pressure, which was confirmed by Dreyer and Verney in experiments on the dog. Cruickshank and Takeuchi found on the heart-lung-kidney preparation of the cat, that with increase of the venous pressure by 100 per cent the quantity of urine decreased as much as 75 per cent. Heidenhain pointed out that a widening of the vasa recta of the limiting layer as a result of stagnation led to a compression of the associated urinary tubules; this tubular compression led to a pressure increase in the lumen of Bowman's capsule and, therefore, to a diminution of the filtration pressure." In cardiac decompensation we encounter a severe disturbance of water and salt exchange. Because of venous stagnation in the kidney, compression of the tubules occurs and thereby a diminution of the energy of filtration ensues, so that the excretion of the primary glomerular urine is inhibited.

Usually the restoration of normal cardiac function is accompanied by the disappearance of the edema. Whatever subsidiary or secondary factors are active in the production of edema in the course of cardiac failure, commonly subside as compensation is restored. While successful use of digitalis promotes the excretion of water and usually relieves the body of dropsy, this is by no means invariably the case. The treatment of cardiac edema involves the use of other procedures, medical and mechanical.

The history of the application of digitalis to the treatment of cardiac disease begins with the recognition of its usefulness in the cure of dropsy. Withering learned that an old woman of Shropshire cured dropsy by a decoction of many herbs. Becoming interested in her results he studied the list of ingredients and came to the conclusion that the foxglove was the effective substance, and tried this in his own practice. (White). In his first publication he advised the use of digitalis until it acted upon the kidneys, the stomach, the pulse or the bowels. It is still the sovereign remedy for cardiac dropsy. The disappearance of edema following the use of digitalis is, as we know, the result of the general improvement of the circulation attributable to the digitalis and not of a specific diuretic effect of the drug. The original ad-

vice of Withering is still excellent; digitalis should be given to the point of production of the therapeutic effect. Other members of the digitalis group should be here mentioned; these include strophanthin, ouabain and the squill preparations, which are finally being made available for use in practice; they develop the effects commonly produced by digitalis. To most physicians, digitalis is more acceptable because its use is better understood, but occasional emergencies and difficulties in administration indicate the use of some other member of the group.

In beginning the treatment of a case of cardiac edema, it is customary to restrict the fluid intake to 1,000 c.c. daily. This may be increased to a daily allowance of 1500 c.c. as the edema disappears. If, however, the patient is so situated that he sweats profusely, larger amounts may be permitted. In another group of patients limitation of the fluid intake must be moderate, if practiced at all, after the dropsy has disappeared. This group consists of those patients with cardiac failure in the course of malignant hypertension or nephrosclerosis (the chronic interstitial nephritis of our text-books), in whom the specific gravity of the urine is fixed at a low level. This type of case is characterized ordinarily by the passage of a large amount of urine with low specific gravity. With the restoration of compensation, which implies the removal of reserve stores of water in the body, such patients must be allowed ample water to allow for what is, to them, normal secretion of urine. Without sufficient fluid to dilute the end products of nitrogenous retention and prepare a urine of low specific gravity, these toxic substances will be retained with ill effects upon the patient.

Rest is an important consideration. Practically, the use of digitalis in cardiac failure implies simultaneous rest, rest in bed and sleep. A notable remission of symptoms and subsidence of edema may occur with rest alone, independently of any medication. It is of the utmost importance that the co-operation of the patient be secured in this regard. To the physician, it is also important to insist that the rest so imperative may often be attained only by the use of morphine or other opium derivatives. Too often the fear of morphine causes opiates

to be withheld while the patient drags on with little or no improvement.

The restriction of salt has been practiced for many years. It really dates to Widál's work published in 1903. Although the subject has been carefully studied, the most recent contributions do not speak the final word as to the actual role of sodium chloride or of other salts in the production or maintenance of edema. Clinically, the restriction of sodium chloride is of value and should be employed. The total daily intake should be limited to approximately three grams.

The Karell diet was first proposed by a Russian physician in 1866, and has been practiced and recommended by many of the world's leading clinicians since its introduction. The author employed the administration of 800 c.c. of skimmed milk daily, no other food or drink is given. He believed the marked restriction of fluid would promote the disappearance of edema. The modern view attributes the favorable effect of the treatment to the low salt content of the milk as well as to the low quantity of fluid taken daily. This method of treatment is of definite value in some cases of stubborn persistence of edema. It is unwise to continue the treatment for any length of time; the "cure" is frankly a starvation diet which tends to weaken the patient greatly. It has been our custom not to continue a course of this diet for more than five days during which the patient should be confined to bed. After the first forty-eight hours it may be supplemented by small quantities of dry food, i. e., two graham crackers with each glass of milk.

Recent years have seen the development of many new drugs capable of producing an increased output of urine. The drugs now in use as diuretics include three principal groups, the xanthin derivatives and related bodies, certain mercurials and certain salts of ammonium and calcium.

The xanthin derivatives include theobromin (dosage, 5-8 grs. t.i.d.), theobromine sodio-salicylate (diuretin), (dosage, 10-20 grs. t.i.d.), theobromine sodio-acetatis, (dosage, 8-15 grs. t.i.d.), theocalcin, (a double salt of calcium theobromine and calcium salicylate containing not less than 44 per cent of theobromine), (dosage 5-15 grs. t.i.d.), theophyllin, (theocin),

(dosage 3-6 grs. t.i.d.), theophyllin sodio-acetas (soluble theocin), (dosage 2-8 grs. t.i.d.), and theophyllin endiamine, (metaphyllin, euphyllin), (dosage 1½ to 3 grs. t.i.d.). Metaphyllin is one of the most effective but is apt to nauseate. The same statement applies to theophyllin. In my own work doses of 40 to 60 grains daily of theobromine sodio-salicylate have apparently given as good results as the others, with rather less tendency to nauseate. It is often necessary to change from one to another in the hope of finding the preparation acceptable to the individual patient. Too much reliance must not be placed upon the usefulness of this group of drugs. They are not always effective and they often nauseate. They do, however, have a definite place in the treatment of cardiac edema. In general we prefer to give digitalis a thorough trial before employing the drugs of the xanthin group. In the effective use of digitalis, this must often be given to the point of nausea. The simultaneous use of another drug which is apt to nauseate, may easily so complicate the picture as to mislead one regarding the effectiveness of a digitalis preparation. The xanthin derivatives are better reserved until the response to digitalis has been determined. If this is not satisfactory diuretics should be employed. In cases with extensive edema, digitalis and diuretics may be used simultaneously from the beginning of treatment.

In 1921, Saxl and Heilig announced the use of novasurol, a mercurial derivative which contains about 34 per cent of mercury, as a diuretic. Its development had been worked out about the use of calomel as a diuretic, which was presented to the profession by Jendrassik in 1885. In his original paper this significant remark is found: "Our observations show that the expected effect only appears when, at the same time, some symptoms of the absorption of mercury are present—a metallic taste in the mouth, salivation or stomatitis." In passing it is interesting to note that Krehl credits to Stokes the first use of calomel as a diuretic, and Jendrassik, in a second article published in 1891, expresses his regret that he had not been acquainted with the book of Stokes which appeared in 1855, adding this statement: "It ap-

pears that the knowledge of this agent has fallen a sacrifice to the widespread therapeutic nihilism of the day."

The use of novasurol may be followed by signs of mercurial intoxication. It was our own experience, for instance, that when this preparation was given several times at intervals of three or four days, after the third or fourth injection the administration was often followed by signs of intoxication such as abdominal pain, diarrhea sometimes with blood, occasional stomatitis and the occasional presence of blood in the urine. In one instance the administration of novasurol to a patient with chronic nephritis with hypertension and edema was followed by suppression of urine for twenty-four hours and a stuporous condition which was alarming. In cases of cardiac failure with marked edema the drug proved itself of great value and became an accepted means of treatment of such conditions. It is, however, contraindicated in cases of nephritis. This contraindication is not applicable to cases with cardiac failure on a hypertensive basis of the benign or essential type, without the findings of renal insufficiency.

In recent years novasurol has been largely supplanted by salyrgan, another mercurial derivative. The indications and contraindications for the use of salyrgan are essentially those for novasurol. There is some difference of opinion as to the respective virtues of these preparations. Amongst my own associates I believe salyrgan is now more widely used. In my own experience the salyrgan has seemed to provoke the toxic symptoms less frequently. Both preparations should be given intravenously, preferably, although deep intramuscular injections may be safely used, though without the certainty of freedom from pain. Subcutaneous use is not to be employed. A patch of dry gangrene with ultimate sloughing is likely to result. Care should be taken in using the intravenous method that the needle is kept in the vein, otherwise the tissues about the vein may slough. A useful precaution, following the intravenous use of either drug, is to raise the arm for a few minutes in order to further the emptying of the veins and prevent too long contact of the drug with the wall of the vein. This is of especial value in those cases of advanced cardiac disease

in which the edema is marked and associated with a very sluggish circulation within the veins, permitting the contact of the drug with the venous wall as a result of which phlebitis may occur.

Salyrgan now is frequently used in combination with ammonium chloride or nitrate. Ammonium chloride in large doses was recommended as a diuretic several years ago and has been extensively used. Ammonium nitrate may be used instead of the chloride. The chloride is given in doses of 90 grains a day, the nitrate in somewhat smaller doses, about 60 grains daily. The combined treatment with salyrgan calls for the administration of the ammonium salt for a period of two or three days prior to the administration of salyrgan. The intermittent use of the ammonium salts is recommended because of their tendency to produce an acidosis.

Certain salts of calcium, particularly the chloride, have been recommended as diuretics. After a study of the diuretic effect of calcium chloride in two normal individuals, two patients with ascites without cardiac disease, and fifteen with heart disease, of whom six showed a well-marked diuresis during the administration of calcium chloride, although they had not responded well to the usual treatment for decompensation, Segall and White concluded: (1) "In cases of cardiac failure with edema in which constant rest in bed, digitalization and the administration of various diuretics have not resulted in a satisfactory diuresis, calcium chloride may be employed as a diuretic. (2) No deleterious effects were observed from the oral administration of calcium chloride, 10 to 15 gm. per day, in any of the cases studied." In his book, White gives the use of calcium chloride equivocal mention largely because of its tendency to cause gastric distress.

Urea is a diuretic with which I have had no personal experience, neither have I been associated with men who have used it for the relief of cardiac edema. In a comparatively recent article, Schott says: "Concerning the use of urea as a diuretic in cardiac oedema the views are widely at variance. Certainly it is subordinate to all the preparations thus far considered. An experiment should only be made in cases in which the usual therapy has not been effective

and also only where no renal complications, as related to the nitrogen excretion, are present. An effect can only be expected from very large doses (30-50 gms. a day or more)."

Twenty-five years ago, von Jurgensen dismissed the prevalent practice of vigorous purgation with these words: "The method formerly in vogue of combating dropsy in heart patients by inducing watery evacuations from the bowel is practically never resorted to at the present time." The practice of purgation as a means of combating edema has survived this condemnation, but in a modified form. Romberg believes that stimulation of the intestinal movements may only avail to an insignificant extent to further an excretion of the retained water as a practical therapeutic measure. White says that "Cathartics and laxatives are often indispensable. Half an ounce of magnesium sulphate every day or every other day may yield one or two watery stools which help not only to keep the bowels open, but to get rid of edema. Other cathartics may be used. Vigorous purgation is, however, to be strongly deprecated because of its weakening effect, which is in part due to the repeated need of going to stool when absolute rest would be far better for the patient, and part due to the nausea that may be produced." I find myself in agreement with this excellent advice.

There remain to be discussed certain methods of mechanical withdrawal of fluid from the serous cavities or the subcutaneous tissues. These include the aspiration of serous cavities, the use of tubes subcutaneously and the practice of deep incisions into the subcutaneous tissues. Of these methods the use of the trocar for the removal of ascitic fluid is the most common in cardiac decompensation; the procedure is familiar to you all and is productive of immediate relief to the patient. Occasional cases of cardiac disease are seen in which ascites is the result of a secondary cirrhosis of the liver rather than of immediate cardiac failure.

The other procedures mentioned are "more honored in the breach than in the observance." As to the use of deep incisions to promote the discharge of edematous fluid, there is little to be said. The edematous tissues are without the normal resistance to infection, without the nor-

mal blood supply upon which prompt healing depends. Especially because of the ease of infection is the use of these devices infrequent. White and Bland have recently advocated the use of Southey's tubes and have contributed an excellent article upon the subject. Their suggestions are worthy of trial in the type of case they describe, the water-logged patient who has been the victim of repeated decompensation and who no longer responds to the employment of digitalis, rest and diuretics with the usual restriction of water and salt. Venesection, which should be used more frequently in the treatment of cardiac disease than is the case, is not a procedure especially calculated to lessen edema, yet its employment by relieving cardiac embarrassment and venous congestion may be followed by the subsidence of edema as the result of general circulatory improvement.

The treatment of nephritic edema involves other principles of treatment than those thus far discussed. While the mechanical failure of the heart which underlies the processes producing edema is amenable to treatment by drugs, and successful treatment is manifested by the disappearance of edema, no such single underlying factor with a similar response to treatment is associated with nephritic edema. Here we deal with an edema which is probably largely due to extra-renal factors, a general disease, as well as one with changes in the renal secreting tissues which inhibit the normal excretion of water. There is no treatment of nephritic edema which may be recommended as a routine procedure; rather may we quote the words of Krehl, used in discussing the water balance in heart disease some thirty years ago: "The physician must experiment in every individual case, but even that is safer than running the risk of doing harm by a mistaken subservience to routine. I will cheerfully submit to the criticism that my indications are 'indefinite' if I can induce every physician to experiment for the benefit of every patient."

The most generally accepted view is that the changes demonstrable in the kidney do not explain the edema. McClure and Aldrich demonstrated an increased affinity for water, a tissue thirst, in cases of nephritic edema, by the intradermal injection of salt solution. The normal

disappearance of the wheal produced is sixty minutes; in the nephritic patient the disappearance time was often as short as five to ten minutes.

Hoff offers an explanation which relates the extra-renal factors of edema and the renal pathology: "In patients with renal edema a marked diminution of the osmotic pressure of the blood plasma may be demonstrated. Instead of the normal value of 25 mgms. Hg. the values are between 20 and 11 mgms. This diminution of the osmotic pressure leads to a disturbance of the equilibrium between this pressure and the blood pressure (50-80 mgms. at the beginning of the capillary) in favor of the blood pressure, so that in this way the increased escape of water, the origin of edema, is explicable. In this result we find a contact with the old teaching of Bright; on the other hand in this manner an insight into renal disease is given, for manifestly an essential function of the kidney is the excretion of the fluid of the blood to provide the normal osmotic pressure of about 25 mgms. By such a conception the 'extra-renal factor' of the diminished osmotic pressure is satisfactorily associated with the 'renal factor' of the renal disturbance here found, while an explanation of edema, a cardinal symptom of many renal diseases, by extra-renal factors alone can never be very satisfactory." Hoff expresses his admiration of the wonderful self-protection of the organism: "If, as a result of cardiac weakness, the passage of the blood through the kidney is impaired, or as a result of renal disease the necessary excretion of urine is impossible, it is fortunate that the body can collect without much harm large quantities of water in the large body cavities and in the connective tissue. In this way, the normal structure of the blood is tolerably well maintained, which is necessary to life, and the vitally important organs, as the brain, heart, and liver, are protected from an accumulation of water, in which a marked edema occurs only as a terminal process." It is plausible that serious renal disease would in general run a much worse course if no edema should occur, than when it does occur.

These observations of Hoff suggest a hypothesis, an explanation for renal edema. It has been shown experimentally that renal func-

tion is subject to central nervous control directly and through the agency of hormones. It is also known that certain substances excite an angio-neurotic edema, which is explicable only upon the basis of nervous influence in association with increased capillary permeability. Is it not possible that marked diminution of renal function, the result of organic disease, may be compensated by the formation of generalized edema, the passage of water into the tissues as the result of a compensatory nervous mechanism, the stimulus to such escape of fluid into the tissues coming, through nervous control from the kidney injured by disease?

Changes in the constituents and in the physical and chemical characteristics of the blood, variations in the osmotic pressure of the blood and the tissues, increased permeability of the capillary walls, retention of certain basic or acid ions in the tissues—these are some of the explanations offered for the facts now known.

The types of nephritis with edema may be considered under four heads: (1) Acute nephritis, (glomerular or glomerulo-tubular); (2) chronic glomerulo-tubular nephritis with edema; (3) lipoid nephrosis; (4) the various forms of contracted kidney in which edema occurs only as a result of an acute exacerbation of nephritis or of cardiac failure, which will not be further discussed.

Any discussion of the modern theories of renal edema involves consideration of the concepts, nephritis and nephrosis. Nephritis includes those forms of renal damage with the characteristic anatomical findings of glomerular and glomerulo-tubular nephritis and the clinical findings of albuminuria, red blood cells and casts in the urine; a urine scanty, highly-colored and of fairly high specific gravity; anemia, rise of blood pressure, certain characteristic ocular changes and the blood findings of nitrogenous retention. Edema is not a constant accompaniment of all types of nephritis. The classification of a demonstrable edema as "nephritic" depends upon the presence of other findings diagnostic of renal disease.

The term nephrosis was first used by Muller in 1905. Jores describes two main types of nephrosis, amyloid and lipoid. Of the latter, which is the type here considered, he says:

"Lipoid nephrosis corresponds to those cases earlier designated as chronic parenchymatous nephritis. Macroscopically the kidneys are enlarged, dirty-yellow or pale-gray in color. Histologically, there is a fatty degeneration chiefly localized in the epithelium of the principal tubules, hyaline albuminous masses in the lumen of the urinary tubules, regeneration of epithelium at places where cellular elements had been destroyed; also lipid substances are richly present in the interstices of the kidney." A significant statement follows: "In the later stages of lipoid nephrosis, the glomeruli are not entirely free, but according to Fahr show non-inflammatory degenerations of the coils." In other words, nephrosis and changes characteristic of nephritis are associated in the later stages of lipoid nephrosis.

Clinically, lipoid nephrosis is characterized by marked albuminuria with relatively few casts and little or no blood, but with the so-called doubly refractile bodies in the urine: anasarca without rise of blood pressure, with a marked diminution of the protein fractions of the blood, especially of the serum albumin, an increase in the blood cholesterol and no nitrogenous retention until late in the disease. The basal metabolic rate is often notably low.

Nephrotic edema is closely related to changes in the blood. The beautiful experiments of Leiter have thrown much light on this subject. He bled animals, centrifugated the blood and returned the corpuscles to the animals in normal saline solution. Thus deprived of plasma proteins, the animals developed generalized edema and Leiter has been able to show that this edematous fluid is poor in protein and is similar to the edematous fluid found clinically in nephrosis. The frequent occurrence of low basal metabolic rates and of cholesterolaemia are clinical facts of importance, the significance of which is not yet explained. Lipoid nephrosis is a rare disease, the diagnosis of which should be accepted only in the presence of characteristic findings.

Edema associated with albuminuria is usually a manifestation of nephritis, acute nephritis or chronic nephritis with edema, to which the term chronic mixed nephritis is often applied in which cases the glomeruli and tubules are more or less

equally involved and the interstitial tissue is often ultimately the seat of change. The prevalent conception of edema as being more closely related to tubular than to glomerular change, and the use of the term nephrosis to signify a renal condition in which the tubules are predominantly the seat of the pathological change, which anatomically is degenerative rather than inflammatory, has led to the custom of describing the tubular changes in chronic nephritis, as "nephrotic." In my opinion this has served to make "confusion worse confounded." Chronic nephritis with edema or chronic nephritis with a "nephrotic" tendency, is essentially different from nephrosis.

Thus in approaching the subject of treatment we have at one extreme acute nephritis, involving the glomeruli principally, with or without tubular involvement, presenting the signs of renal insufficiency and edema, without nephrotic signs. At the other extreme the typical lipoid nephrosis just described, and between, a primary glomerular nephritis with associated changes in the tubules and certain nephrotic symptoms, especially the marked generalized edema. Since Volhard's description these associated tubular changes have been regarded as the "nephrotic component" of chronic nephritis and have been accepted as in some way peculiarly connected with the edema. In so far as this explanation of the edema of chronic nephritis has served to direct attention to the extra-renal causes of edema (and by "extra-renal causes of edema" we mean changes within the body associated with renal disease which promote the retention of fluid), it has been of value. But in so far as it has served to confuse practitioners by putting undue stress on a single symptom common to two widely different diseases, the use of the term "nephrotic component" has not helped to clarify our knowledge. Chronic nephritis with nephrotic change must be regarded as nephritis; pathologically it presents the picture of diffuse renal disease; etiologically, it is commonly a sequency of acute glomerulo—or glomerulo-tubular nephritis. The clinical course is that of nephritis with increase of blood pressure, nitrogenous retention and characteristic changes in the eyes. It may be that the "nephrotic" element in some cases is the result of prolonged

loss of albumin and consequent anemia. Chronic nephritis is a common condition; a true lipid nephrosis is not often seen.

Lipoid nephrosis probably develops on an extra-renal basis which is responsible for the characteristic changes in the blood and the albuminuria. The two conditions should be strictly differentiated, particularly in view of the fact that true lipid nephrosis may be benefited by large amounts of protein to replace the loss of plasma protein, while high protein diets are contraindicated in the chronic nephritis with edema.

The treatment of edema in the types of renal disease under consideration may be summarized thus: (1) rest in bed is indicated in all forms; (2) fluid restriction is indicated in all; (3) restriction of salt is indicated in all; (4) the inflammatory process characteristic of nephritis affords a contraindication to the use of diuretics, absolute in the acute form, relative in the chronic; (5) protein restriction is indicated in nephritis because of the danger of retention of the end-products; in lipid nephrosis protein is indicated. In chronic nephritis with edema of long standing, it is possible that the continued loss of albumin promotes edema either directly or secondarily through aggravation of an anemia. Unless nitrogenous retention is demonstrated, it is probably unwise in these cases to keep the protein intake at a low level; the use of a diet moderately rich in protein may be of advantage in improving the blood picture and lessening the edema; (6) in lipid nephrosis fats are restricted and thyroid in large doses is occasionally of value; protein should be given freely.

As the active renal hyperemia of nephritis subsides the secretion of urine increases. Where chronic disease supervenes, restriction of salt and less rigid restriction of water should be continued. With persistence of edema the diuretics of the xanthin group may be tried; if successful their use may be continued. The same observation applies to the use of ammonium chloride and nitrate. The mercural diuretics are contraindicated in the presence of nephritis.

The xanthin diuretics are of doubtful efficacy and questionable indication. The mercurials are dangerous in the cases with actual renal pathology. In lipid nephrosis, prior to the end-

stage with signs of nephritis and beginning renal insufficiency, the acid-producing diuretics are of especial value, and other diuretics, including the mercurials, may be used with due regard to the conditions of the particular case.

The chlorine ion in sodium chloride has been regarded as the factor productive of edema. Now evidence increases that the sodium ion is responsible. Barker has shown the different effects of potassium and sodium, and points out the effectiveness of potassium chloride in removing edema, as opposed to the production or increase of edema by sodium chloride. Lashmet has quite recently published a paper advocating the view that the acid ion is diuretic in its effect. He believes that the alkaline ion promotes edema and suggests a diet and plan of treatment to diminish the alkalinity of the blood by the administration of acid-forming substances. There is much support for his opinions to be found in the proven diuretic action of ammonium chloride and nitrate, and of calcium chloride.

The conception of uremia as an acidosis encouraged an endeavor to provide for nephritics a diet calculated to maintain the normal alkalinity of the blood. These "basic" diets particularly restrict animal protein, wheat products and cereals. Now it appears probable that the diminution of normal tissue alkalinity which is called acidosis promotes the excretion of water. Mention has been made of the diuretics which produce an acidosis. In one of their publications, Keith and Bannick mention the occurrence of six cases of acidosis in the course of medication with ammonium chloride. No case occurred from the administration of ammonium nitrate. The authors believe that inasmuch as these salts cause an increase in urea and a decrease in alkali reserve, the blood of patients so treated should be carefully checked during the course of medication. It develops that our major problem in the treatment of nephritis is to attempt the prevention of uremia by an alkaline or basic diet without the production of edema and to promote the excretion of water by means of diet or drugs, or both, which tend to the development of acidosis without producing uremia.

In a true nephrosis, a diet containing a high content of protein, to make up for the constant

loss of large quantities of albumin and low fat, to lessen the blood cholesterol, which may be the offending substance, rather than simply the result of the general condition, is indicated. It is probable that the high protein diet also exerts a diuretic effect as the result of liberated urea (King). Where the basal metabolic rate is low, thyroid is likely to produce significant improvement and may have to be used in large doses, under careful supervision. The salts of ammonium are also useful in these conditions. These should be given intermittently. Sodium chloride should be rigidly restricted. Fluid restriction is also indicated. Mercurials may be used in the stage of nephrosis alone.

The importance of rest in the control of renal edema deserves emphasis. These patients cannot usually be kept in bed over long periods of time; often short periods of bed rest will be followed by a notable diminution of the edema. Purging is usually ineffective as a means of removing edema; it may be dangerous in the presence of impending uremia because of the inflammatory conditions of the gastrointestinal tract so often found in advanced nephritis. Occasionally sweating is of real value; usually these patients will not respond to diaphoretic measures. Digitalis is of value only when cardiac failure is superimposed.

SUMMARY

1. The treatment of cardiac edema is based on fairly well-established theoretical conceptions and well-grounded clinical experience. Until the cardiac disease has reached a late and hopeless stage edema can be quite well controlled.

2. The treatment of nephritic edema lacks a satisfactory theoretical basis. Until the mechanism of the pathogenesis and production of nephritic edema is better comprehended, it should be borne in mind that our clinical procedures are tentative, neither final nor satisfactory. The physician must individualize the problem in each case, and above all must keep his mind open and in touch with the intensive studies now in progress concerning this important disease.

In closing, may I be permitted another quotation from Hoff: "The most recent development of the teaching about edema may be re-

garded as a characteristic example of the most recent development of medical science. A preceding century celebrated its greatest accomplishments in the discovery of the localization of many diseases, the *sedes morbi*. In edema we have before our eyes a problem which cannot be satisfactorily explained through the search for a local cause. Neither 'renal causes', nor 'extra-renal causes,' nor 'disturbances of vascular permeability,' nor 'preparation of the tissues for edema' may be recognized as an explanation—neither for edema in general nor for renal edema alone. Heart and kidneys, blood pressure and osmotic pressure, vessel wall and tissue imbibition and many other processes we must regard as a functional unit in which our abnormality acts on one point with many connections to other organs. The most recent development in medicine directs our attention from the local diseases of organs to the organism as a whole. The final content of medical investigation and our professional work is not disease of the particular organs, but the sick man."

TABULATION OF CASES OF RAT-BITE FEVER IN THE UNITED STATES AND CANADA WITH REPORT OF A CASE*

CHARLES JAMES BLOOM, M. D.

NEW ORLEANS

HISTORICAL

Rat-bite fever is an infectious disease, following the bite of a rat or, occasionally, the bite of some animal preying upon rats, as the cat, the ferret and the weasel. Though uncommon, this disease is widely distributed.

Wilcox (1840) has the distinction of reporting the first case in American literature. Known in Japan for many years, the disease was described by Katsura (1892) in his textbook, "System of Surgery". Miyake (1899) first accurately gave the clinical aspects of *sodoku* and subsequently (1902) published an account of the disease under the name "Rattenbisskrankheit".

Evans (1903) collected fifty-five cases, of which fifteen were in the United States. Leadingham (1928) recapitulated one hundred and

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eighty-nine cases, reporting twenty-eight in the United States; this included the eighteen cases in this country compiled by Crohn (1915).

Among the writers who are credited with comprehensive articles on the literature are Proescher (1911), Crohn (1915), Blake (1916) and Arkin (1920). More recent papers are those of McDermott (1928) and Robertson (1930), both of whom have published exhaustive bibliographies.

The writer has been able to collect seventy cases in the United States and Canada, including eighteen reported by Crohn (1915). Data is lacking in five cases, and no state is mentioned in Crohn's tabulation above referred to. The distribution is confined to the following named States, and Canada, with number of cases:

UNITED STATES

New York	6
S. Carolina	5
Louisiana	4
Georgia	3
Indiana	3
Nebraska	3
Oklahoma	3
California	2
Connecticut	2
Illinois	2
Iowa	2
Massachusetts	2
Missouri	2
Alabama	1
Kansas	1
Maryland	1
N. Carolina	1
N. Dakota	1
N. Jersey	1
Ohio	1
Pennsylvania	1
Tennessee	1
W. Virginia	1
State unknown	18

67

CANADA

3

Total 70

Therefore, according to available records, sodoku is distributed in twenty-three states and Canada.

ETIOLOGY

Futaki (1916) and his co-workers demonstrated a specific organism as the causative factor of rat-bite fever, "*Spirochaeta morsus muris*" ("*Spirillum minus*"). Interestingly enough, it is accepted that the spirochete, originally de-

scribed by Carter (1887), is apparently identical with the one isolated by Futaki. In 1906, Wenyon described a spirochete in the blood of mice which he named "*Spirochaeta muris*". Morphologically, Wenyon's "*Spirochaete muris*" closely resembled Carter's "*Spirillum minus*" and there is now little doubt but that they are identical. A spirochete from the same source as that of Wenyon was isolated by Breinl and Kinghorn (1906), and for which they proposed the name "*Spirochaete laverani*". Ehrlich "in his classical experiments on the chemotherapy of spirochetal infections leading to the discovery of salvarsan, used the '*Spirochaete laverini*'". That a spirochetal origin was suspected prior to the work of Futaki (1916) is found in the writings of Hata (1912), Dalal (1914), Oda (1915), Surveyor (1913) and Crohn (1915). On this hypothesis, cases were successfully treated with salvarsan and its homologues.

No attempt will be made by me to further review this subject in detail as Lanford (1926), McDermott (1928) and Robertson (1930) have completely described the etiological history of sodoku. Robertson says in part: "The final proof that '*Spirillum minus*' is the etiological agent of rat-bite fever or sodoku and of the co-identity of the rat and mouse strains of the virus is found in the work of Theiler et al (1926) and of Schockaert (1928), both of whom have successfully inoculated man (cases of general paralysis of the insane) with the human strain in laboratory animals and, in the case of the second worker, also with a strain from white mice."

MORPHOLOGY

Considerable variations have been noted with regard to the size of the parasite. Robertson (1930) says: . . . "it varies in different animals, and also in the same animal from day to day. There appears to be a certain tendency (Robertson 1924) to uniformity of size in any given animal on any given day, sometimes long forms preponderate, at others shorter or intermediate varieties are more in evidence. The greatest body length is some 9 u or 10 u and the shortest 1.5 u. The average size probably lies between 3 u. and 5.5 u. Thickness is much more difficult to estimate; Robertson (1924) estimated it at about 0.2 u. and Schockaert (1928) at 0.1 u.

The width of the organism as a whole, i. e. of the spiral, is about 0.7 u. The waves of spirals, measured from crest to crest, each occupy from 0.8 u to 1 u and are very regular and fairly sharp. The number of such waves or coils in each 'Spirillum' is accordingly directly proportional to the length, varying from one and a half to eight or nine. The ends tend to be blunt and rounded in the majority but in some there is a tendency to a more tapering extremity. In such as have the sharply-defined, blunter ends the terminal flagella are more commonly multiple whereas the more pointed types seldom have more than a single flagellum." "Bright light is said to inactivate the parasites so that observations on a single living specimen can only be carried out for a few seconds after which it ceases to move, swells and loses its waves. This, however, is denied by Schockhaert who found that exposure to the light passing through the microscope did not seem to modify the movements in any way. The writer's experience, using a bright light (30 or 100 candle power point-o-lite) is that the movements certainly are slowed but the effect is not nearly so rapid as indicated; active movements may persist for an hour or longer and the structure during that time does not alter appreciably."

The method of staining "recommended by Adachi (1921) and confirmed by McDermott (1928) consists of 1. fixation for from 30 to 60 seconds over a solution, osmic acid 1 gram, mercuric chloride (corrosive sublimate) 5 per cent. 10 drops, distilled water 100 c. c. and 2. staining for about twelve hours in Giemsa's solution (1 part of stain to 10 parts distilled water) to every 10 c. c. of which 0.6 c. c. of a 1 per cent aqueous solution of potassium carbonate has been added." Robertson (1930) discusses technique at length.

TRANSMISSION

McDermott (1928) and Robertson (1930) have both fully discussed the mode of infection. The latter states: "The majority of cases in man result from the bites of rats, although a certain number may follow on those of other animals such as cats, ferret, dogs, etc. The scratch of a cat has been incriminated on two occasions (Yamada, 1917), and (Sano, 1917),

but it is more than likely that these are merely examples of direct or mechanical contamination with infected material as are also the cases described by Atkinson (1913) from a kitten and a ferret both of which had been in contact immediately previous to the bite with dead rats. Iver (1929) recorded a case, diagnosed on clinical grounds, in a patient bitten by a bandicoot. This occurred in Madras. Smallwood (1929) also reported a case, the diagnosis of which was dependent on the clinical signs, following the bite of a young pig.

"The question of how the 'Spirillum' is actually transmitted from the rat to man is one which has led to considerable discussion, for the organism cannot be demonstrated in the saliva of the animal and experimental inoculations with that secretion have been also, with one exception, negative. The exception, which was probably more in the nature of an accident, was that of Kusama, Kobayashi and Kasai (1919), who managed to infect one mouse by this means. Up till recently it was thought that, since the saliva as a rule was non-infective, the small abrasions in the gums and buccal mucosa resulting from the act of biting, might cause small haemorrhages and that the blood containing 'Spirilla' could thus contaminate the bite. Mooser (1924), however, suggested an alternative mechanism. He drew attention to the fact that rats, some time after infection, showed certain eye symptoms such as conjunctivitis, keratitis, iritis and palpebral edema, and that in most instances the accompanying secretion was infective even though the blood was non-infective. He therefore concluded that the rats, even in the absence of injuries to the mucous membrane of the mouth, might be infective by means of this optical secretion, the 'Spirilla' reaching the mouth through the lacrymonasal duct. As noted by Mooser and also by McDermott (1928), desquamated duct cells and erythrocytes may occur in the lumina of the salivary gland ducts, a fact which renders it possible for the organism to be present in the saliva in the later stages of the disease, and, further, McDermott also points out that in rats, late in the infection, 'tertiary' lesions (vide infra) are of almost constant occurrence. These lesions frequently ulcerate—thus discharging 'Spirilla'—into the

bronchi, mouth and upper alimentary tract. Such records as are available of the rats which have been known actually to transmit the disease to man would suggest that the infecting animals were in poor physical condition similar to that seen in the so-called tertiary stage noted above. Honda (1928) has carried out a series of experiments (with 'Treponema recurrentis' as well as 'Spirillum minus') with the object of determining whether the organisms could pass through undamaged skin and mucosa. 'S. minus' did not produce infections when applied to the skin and only about a quarter of the cases were positive where the application was made on the buccal mucosa or the conjunctiva."

"REVIEW OF THE CLINICAL FEATURES"

"The disease usually commences within thirty days after the bite, with a rigor followed by a rise in temperature and in pulse and respiration rates. The earlier Japanese authors, however, claimed that the incubation period might be as long as two years. The bite wound usually heals by first intention; in most cases about the time of onset, pain is felt in the scar, and the surrounding area becomes swollen and oedematous; later, vesicles form at the position of the bite and in many cases the wound ulcerates, the ulcer presenting a clean surface, indurated edges, and a serous discharge (in which the causative spirillum is frequently demonstrable), and resembling the scrotal lesions of the experimental disease in the guinea-pig. (v. infra). Arkin (1920) and Adams (1925) lay stress upon the resemblance of this ulcer to an extra-genital chancre. It is worth noting that in the true spirillary sodoku pus is not formed—pus formation apparently indicates a mixed infection or an infection with organisms other than the spirillum.

"Coincident with these changes in the wound, lymphangitis develops, accompanied by a swelling of the regional lymph glands, which are at first soft in consistence, but later become firm, though always remaining discrete and not adherent to surrounding structures.

"The temperature soon returns to normal, but after a variable interval—usually three to four days—rises again, with or without a rigor, only to fall after two or three days. This in-

termittent course usually continues for some months, a spontaneous cure ultimately resulting, but may be prolonged for years, e. g. four years in the case recorded by Corinaldesi (1924) and eight years as reported by Surveyor (1913).

"During the apyrexial intervals the patient usually feels quite well and presents few or no symptoms except the local changes and the lymphadenitis. The febrile periods are accompanied by other symptoms, e. g. muscle and joint pains, vertigo and headache, and often by the appearance of the characteristic rash.

"The rash, present as a rule only during pyrexial attacks, is a maculo-papular eruption of a reddish-purple colour occurring in patches from the size of a pea up to that of the palm, regular in outline, indurated and slightly elevated above the surface of the skin, disappearing only on heavy pressure, and usually unaccompanied by pain, though a burning sensation may be complained of. It is generally said that the rash does not involve the head, palm, sole, or mucous membranes; it has, however, been described as involving these regions—the face by Herzfeld and Mackie (1926), and the throat mucosa by Collier (1924) and Giglioli (1927).

"An urticaria towards the end of the disease is described by Miyake (1902) and by D'Hallium and Fievez (1918).

"The fall of temperature to normal is almost invariably accompanied by sudoresis.

"The lymphadenitis increases until the glands may be as large as a hen's egg and extends until all the superficial glands are palpable.

"In a favourable case the attacks of fever occur at longer and longer intervals and are of less and less degree, and ultimately cease, while the glandular enlargement disappears.

"The ulcer at the position of the bite heals, leaving a bluish-red patch, which may persist for years.

"Certain symptoms and signs which are not constant, or are present only in the more severe cases, may now be briefly dealt with.

"Circulatory System: In long-standing cases some degree of anemia is very frequently present, along with polynucleosis and a mild eosinophilia. A hemic murmur may be present—Dick and Rutherford (1913).

"Respiratory System: Is usually very little

affected, though in some cases slight bronchitis with slimy expectoration, and rarely dyspnea, have been observed. Pleurisy has been reported—O'Carrol (1912).

"Alimentary System : In long-continued cases constipation is usual. The tongue shows a yellowish-brown coating, and in one case—Burton-Fanning (1921)—was much swollen. Abdominal pain occurred in Cruickshank's (1912) case; gastro-enteritis was observed by Annibale (1920), Carpentier (1884), Peña y Maya (1885), and Cook (1885-6). Icterus has been recorded in one case—Fulghieri's (1925).

"The spleen is usually not involved; however, splenic pain has been recorded by Dick and Rutherford (1913) and in cases described by Miura and Toriyama (1897) and Burton-Fanning (1921) the organ was definitely enlarged.

"Genito-Urinary System: In mild cases there may be no involvement of the kidney, but in cases of any severity a toxic nephritis is common, the urine being diminished in amount and containing albumin and casts. The diazo reaction may be positive.

"Epididymitis was present in one case of Burton-Fanning's (1921).

"Nervous System: Is usually affected, especially during the attacks of fever, when headache, a heavy feeling of the head, tinnitus, vertigo, delirium, stupor, or coma may occur. Anopsia has been observed—Ebert and Hesse (1925). Muscular tenderness is a practically constant symptom—sometimes, indeed, the muscles are indurated—Grenet and Lehucher (1918). The tendon reflexes may be increased, diminished, or absent; anaesthetic or paraesthetic areas on the extremities are common; patches of hyperaesthesia may occur anywhere on the body. Conjunctivitis, with or without chemosis conjunctivae, has been seen—Frugoni (1912).

"Skeleton: Periostitis and perichondritis may be present—Ebert and Hesse's case presented perichondritis of the rib cartilages and spondylitis, but, in view of the occurrence of pus containing a leptothrix, these lesions may not have been due to the specific spirillum.

Joint pains, particularly mentioned by Mauriac (1918), are common.

"The Wassermann reaction is positive in about 50 per cent. of cases—Blum and Clement (1925).

"Ten per cent of untreated cases die, but in cases treated by salvarsan the mortality is negligible.

"While the preceding description may be taken as applying to the majority of cases, Miyake described, in addition, an apyrexial form, in which the nervous symptoms are severe and which is frequently fatal, and an abortive form, in which only one or two febrile attacks occur, and from which recovery is rapid.

"Morbid histology: Microscopic examination of the local lesion has been made by Proescher (1911) and by Delamare and Mouchet (1923) and by Herzfeld and Mackie (1926). The descriptions, except that of Proescher, do not differ appreciably from that of corresponding lesions in the guinea-pig; as Proescher observed a peculiar organism in his specimens, his description is not suitable for comparison.

"Post-mortem appearances. Complete autopsies have been performed by Miura and Toriyama (1897), Kaneko and Okuda (1917) and Blake (1916). Omitting changes due to the age of the subjects, their findings may be summarized as follows: 1. General marasmus; 2. parenchymatous degeneration of heart, liver and kidneys; 3. catarrhal gastroenteritis; 4. catarrhal cystitis; 5. meningeal hyperemia and edema; 6. lymph glands hyperplastic with dilated sinuses; 7. hyperemia of suprarenal cortex, of spleen and kidneys; 8. hyaline degeneration of central arteries of Malpighian bodies in the spleen. Such findings agree, both macro—and microscopically, with those in experimental guinea-pigs."

*(Editorial Note:—*The author records in tabular form a very complete analysis of all the cases of rat bite fever that have occurred in the United States and Canada since the original ones described in 1840 by Wilson and by Watson. There are incorporated in this table 70 cases; 40 of these are in children. In the period between 1840-1915 the treatment was of various types. From 1915 on in the majority of instances arsenic in one form or another was

the treatment of choice. Dr. Bloom's detailed study included also the sex of the individual when given, divided 37 males and 23 females. The age incidence varied from early infancy to extreme old age, most of the cases being in children and young adults. Where stated in the original report the race of the individuals was included. There were 16 white and 6 colored. The date of the report and the state from which the case occurred is also incorporated in the table. Lastly, the anatomical location of the bite is detailed. In the majority of instances this was on an extremity, generally a finger, but in several cases unusual sites, such as the eyelids or shoulder, were the seat of the original infection. In eight instances *Spirochaeta morsus muris* was demonstrated; in five instances a *Streptothrix* was demonstrated.)

MORTALITY

The mortality in this tabulation (1840-1930) (including one doubtful case and one death from pneumonia two weeks after leaving hospital) is 11.4 per cent. Miyake (1902) gave the rate in untreated cases as 10.5 per cent. The introduction of specific treatment with arsenical preparations, however, greatly reduced the mortality. In the present series, since 1923, there is but one death recorded and this was the case of death subsequent to leaving hospital above mentioned.

CASE REPORT

Earl H., aged 2½ years, of Covington, La., was referred to me April 11, 1930 by Dr. Joseph Cohen, with a tentative diagnosis of rat-bite fever. He was admitted the same day to Touro Infirmary, New Orleans, La., where he was observed by me through April 18, 1930. During the first week of March, 1930, an older brother placed a large rat in a cage, which he had caught in the yard. When his younger brother attempted to pet this rodent, he was bitten on the middle finger of the left hand. Peroxide and iodine was applied by the parents. Within the period of a few days, the two small scabs fell off and he seemed perfectly well. On April 2, nine days prior to admittance, an area within the region of the bite became swollen and slightly discolored and associated with this there was a marked swelling of the extremity and streaks radiating from the site of the bite. The child became languid, complained of headaches, and was nauseated.

Physical examination: A well developed, and apparently healthy child was extremely ill and most toxic. He was very pale. Though breathing rapid-

ly, the same was not labored. An examination of the upper left extremity revealed that it was considerably edematous. There was an area of redness, with a purplish discoloration around it, and marked swelling of the first phalanx of the middle finger, with streaking up of entire forearm and arm. A reddish purple macular rash was quite visible on the extremity with a few on the chest and abdomen. The axillary glands were swollen and slightly tender. Other than this, the physical examination was negative.



Photograph of Case of Rat-Bite Fever

The urine was negative. The blood showed a leukocytosis of 19,500, polynuclear cells being 82 per cent and with a slight secondary anemia.

Animal experimentation was cared for by Lanford, who had previously (1925) isolated the spirochete. Unfortunately, he was never able to recover the flagellate in the present case.

Treatment: The patient was given, while in the hospital, two injections, intramuscularly, of .15 grams sulpharsphenamine. Saturated solution of epsom salt compresses were applied to the extremity. After leaving the institution, four additional injections were given at intervals of one week. Other than an elevation of temperature on April 22 and 23, reaching 102 2/5° F., there was no subsequent exacerbation and, from reports, has made a complete recovery. A photograph illustrate concisely the interesting aspects of this case of rat-bite fever.

SUMMARY OF CASE

1. The preliminary bite of a rat.
2. An incubation period of ten to thirty days or more, usually about two weeks. (In this case about thirty days.)
3. A temperature curve which runs a typical course suggesting at times malaria or relapsing fever with recurrent paroxysms at regular intervals of several days. The elevation of temperature is gradual, but usually on the second or third day it falls by crisis often associated with sweating. There is always a leukocytosis.
4. Skin reactions: a. Reaction at site of injury—redness, tenderness and swelling. The lesion is well outlined, the edges are slightly raised and seem a different color, with no tendency to suppurate. b. A peculiar erythema about the neighboring joint when the bite is on an extremity. c. A general macular eruption over the body and extremities, usually are circular, reddish spots. These disappear on pressure and do not seem to itch or desquamate. During remissions of temperature they fade, but do not entirely disappear. d. Involvement of the glands nearest the site of infection.
5. Treatment with salvarsan or similar arsenical preparations is attended with rapid response.

CONCLUSIONS

1. Sodoku, or rat-bite fever, is a disease transmitted by the bite of a rat, cat, ferret or weasel, carrying the *Spirochaeta morsus muris*.
2. The clinical picture is definite and the bite of a rat should not be regarded as a trivial occurrence.
3. Sulpharsphenamine and allied drugs give immediate relief.
4. Seventy cases of rat-bite fever occurring in the United States and Canada are reported. Of this number, forty were children, twenty-three adults, and age not obtained in seven cases.
5. Isolation of the organism by animal inoculation is at times very difficult and in this tabulation was only recovered in four of the seventy cases. *Spirochaeta morsus muris* was recovered from serum taken from bite

wound in three cases, and blood culture reported as positive in one case. A streptothrix was isolated in five cases.

UNDULANT FEVER*

R. H. CLARK, M. D.

HATTIESBURG, MISS.

Neither the case which I shall present, nor the brief discussion which follows, represents anything new on the subject of undulant fever. The *raison d'être* for presentation is that probably more than the average number of cases of the infection are escaping our attention, the cause of the illness not being determined.

On January 28, 1931, a white female, aged 70 years, was seen for the first time in the office, complaining of weakness, loss of appetite, and some loss of weight. Obstinate constipation was the only other symptom. The onset of the symptoms had been very insidious. She could not remember just when it had begun, but members of the family thought she probably began to complain occasionally and vaguely some six weeks previously, and that her symptoms had gradually grown worse. Past history and family history were essentially negative. She had had no contact with animals or livestock, and drank a moderate amount of raw milk daily, the product of a grade A dairy.

Physical examination revealed nothing remarkable. She presented the appearance of a healthy individual, well developed, well nourished, and about 60 years of age. The temperature, pulse and respiration were normal. The only evidence of disease was a blood pressure of 120 systolic and 80 diastolic, and the heart sounds were somewhat soft and distant. The heart was possibly enlarged. There was some slight degree of generalized, though indefinite tenderness in the abdomen. The urine showed a slight trace of albumen and an occasional hyaline cast. Feces negative, Wasserman negative. A gastro-intestinal series was negative and the chest plate was negative. Blood: Hb. 70 per cent, erythrocytes 4,230,000, small lymphocytes 35, large lymphocytes 9, neutrophils 55, and basophils 1. No malaria plasmodia were found.

The impression gained was that there was some degree of myocarditis and treatment along this line was instituted, which included supportive measures and rest. With no additional symptoms

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she grew progressively weaker. Later we began taking the temperature regularly, which was found to be subnormal in the morning and reached 99° and 99.5° in the late afternoon. February 14, 1931, blood culture for typhoid was negative, as was the Widal. Agglutination test for undulant fever gave complete agglutination in titre of 1:810. There was some increase in the afternoon temperature, some days reaching 101.5°, later in the course of the disease, but there were no symptoms suggesting fever. The complete temperature chart showed some tendency to undulations, although there were no days on which there was no fever. The disease ran its course in about eight weeks from the date of diagnosis and there was apparently complete recovery. The individual was never acutely sick and it was with difficulty that she was induced to remain in bed. The discovery of the slight afternoon temperature led to the investigation which resulted in the diagnosis.

Undulant fever was for many years thought to be limited to the Mediterranean region. During the past few years it has proven to be world wide. Prior to 1925, 128 cases had been reported in the United States, most of these from Texas, New Mexico and Arizona. In 1925, 24 cases were reported in the United States, 46 cases in 1926, 217 in 1927, 649 in 1928, and 1301 in 1929. There are no doubt many others not included in the statistics quoted, which were collected by Simpson and Hardy, since the disease was reportable in only thirty-two states. In those sections where special attention has been given to the condition, there has been a great increase in the known incidence. Dr. Kemmerer tells me that he found 17 positive reactions out of a total of 694 tests at the State Hygienic Laboratory during 1931. He states that the relatively large number of tests is due to the fact that he made the test for undulant fever on all specimens of whole blood sent in for tests for typhoid fever.

Undulant fever is a specific febrile infection caused by the presence in the blood of the *Brucella*. Simpson, Carpenter, Orr, and others are of the opinion that the disease is transmitted chiefly through raw milk of cattle infected with the abortus variety of the organism. Hardy's investigation in Iowa, where he studied 375 cases, led him to the conclusion that direct contact with infected cattle or hogs was responsible for many cases. He demonstrated that the skin may act as a portal of entry.

The disease may present many symptoms in common with typhoid fever, malaria, tuberculosis, influenza, acute rheumatic fever, endocarditis, bronchitis, tularemia, and pyelitis. It occurs more frequently in males, and more in the rural districts. Children possess a degree of immunity. The incubation period varies from five to twenty-one days, the average being about two weeks. The usual onset is gradual with an afternoon rise of temperature, often with chills and a drenching perspiration. Simpson points out the disparity between the subjective sense of feverishness and the actual fever, there often being no feeling of fever. Hughes' advice of more than thirty-five years ago remains timely: "It is well to take the temperature of a case reporting sick with symptoms of dyspepsia, debility, etc., as a precautionary measure, and if there is any doubt, take it during the afternoon or evening. Fever is often overlooked for want of such precaution and cases are treated for slight symptoms before the real condition is discovered, to the detriment of the patient's health and the doctor's reputation."

Restlessness and insomnia often occur. The recurring relapses of fever are said to be the exception rather than the rule in the recent cases studied in this country. Eighty-nine of Simpson's series had but one febrile period lasting from one to several weeks, while 11 per cent had the recurring undulations. Some were so mild that the patient remained at work. Loss of appetite, loss of weight, and constipation are usual. Abdominal pain and tenderness are present in many of the cases, inconstant in its location and character.

The spleen was palpable in about one third of Simpson's cases. Pains in the joints was present in about one third. Swelling of the testicles was less often noted. A macular or maculopapular eruption is seldom present.

The blood usually shows a secondary anemia and a leukopenia with a relative lymphocytosis. There is nothing pathognomonic about the clinical features of undulant fever and the diagnosis will depend upon laboratory examinations. The agglutination test is probably the most practical and available procedure and should be resorted to in those cases of vague febrile diseases in which the diagnostic criteria are not

convincing. Five or 10 cc. of blood should be collected as for a Wasserman and submitted to the laboratory. It is well to delay the test seven to ten days following the onset of the illness since the agglutinins do not appear until sometime in the second week. Agglutinations in dilutions of 1:80 or above, are considered significant. Five per cent of individuals with undulant fever from whose blood the organism may be recovered fail to develop the agglutinins. Also the agglutination in a low titre may represent the residual agglutinins of a previous attack of the disease. The occasional cross-agglutination of the *Brucella* and the tularemia should be remembered.

Three other tests are available: (1) recovering the organism from the blood, feces, or urine, (2) intradermal test, and (3) animal inoculations.

The disease is rarely fatal, reported cases showing a mortality of 1 to 4 per cent. However, the protracted course and the prolonged invalidism that occurs in many cases reveal that it is more severe than the figures indicate. Hughes gives the duration as from two weeks to two years, the average being four months. Simpson states that in one case there was evidence of relapses and remissions extending over a period of eight years. Death may occur from heart or lung complications, exhaustion or hemorrhage.

Prophylaxis is of prime importance in the control of undulant fever. Pasteurization of milk and dairy products is the most reliable measure at our disposal. Hardy points out that proper precautions in the case of minor wounds of the skin should be taken by those who handle live stock and carcasses. Prophylactic inoculation has not proven effective.

The treatment consists of rest in bed, maintenance of strength and nutrition and alleviation of symptoms as they arise. As much food in the form of liquids and soft diet as is tolerated should be given. Vaccine therapy has been much tried and is recommended by many, although there is some disagreement as to its value. Hardy reports that while many of his series showed marked improvement following the injection, others were unmodified by the same treatment, and that caution must be exercised

in the evaluating of any therapeutic measure in a disease in which there are natural remissions. Serum therapy has not proven of value.

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DISCUSSION

Dr. Felix J. Underwood (Jackson): I shall briefly discuss a few thoughts relative to the prevention of undulant fever.

In considering the prevention of *Brucella* infections in human beings and animals, due consideration must be given to the possibility of immunization. Is the injection of an adequate number of killed organisms as effective in this disease as it appears to be in typhoid fever? Experimental evidence justifies little hope in such procedure at the present time. Experimenters have tested a fairly large series of guinea pigs. Those injected with three doses of heat-killed *Brucella melitensis* variety abortus, and which developed agglutinins in a titre of 1:80 or higher seem to become infected as readily as did untreated animals. It seems that neither the course of the disease nor the pathologic lesions were significantly different in the treated guinea pigs and the controls. The injection of killed organisms, therefore, does not promise to be an effective prophylactic measure.

A second question of fundamental importance is the thermal death point of *Brucella melitensis*, variety abortus and variety suis. The recent report by Arnold, who found living *Brucella* after exposure to the temperature of commercial pasteurization, has created a demand, at least from some, for a reconsideration of this subject. Many investigators, with special reference to Carpenter and Boak, have reported all organisms to be killed after twenty minutes at 140° F. Hardy, Jordan, Borts and others in all of their tests have not found living organisms following exposure to a temperature of 144° F. for thirty minutes followed by rapid cooling in the ice box. Organisms were,

however, cultured in one test by Hardy in which the temperature was slightly inconstant, fluctuating between 139° and 142°F.

These laboratory data and epidemiological findings demonstrate that controlled pasteurization is effective against organisms of the *Brucella* group. At present, effective control measures are those designed to prevent human contact with virulent organisms which leads to the infection of susceptible individuals. It would appear that work along this line might be carried out by bearing in mind that the chief modes of transmission of the disease are: ingestion of raw dairy products, and contact with infected animals; also by remembering that the portal of entry into the human body may be either the mouth or the skin. It is our opinion that by far the greater number of cases enter by the mouth in the form of infected raw milk.

In the prevention of undulant fever, as in no other disease, members of the human and veterinary medicine professions are called upon to unite forces in a common attack.

The significance of contagious abortion in its relation to disease in man probably exceeds bovine tuberculosis.

Health education against this disease should be conservative and guarded, but it is essential that accurate information be conveyed so that the people may intelligently practice preventive measures. The public should be so taught that people will demand safe dairy products, without diminishing the consumption of them; the stock breeders, so that they will work for healthier and more productive animals.

It would seem advisable to require that all dairy cows pass satisfactorily an agglutination test before such milk is distributed in raw form. Adoption and enforcement of a standard milk ordinance, including the requirement that the contagious abortion test be applied to all dairy cows, is a consummation much to be desired.

Undulant fever is only one more condition added to the already formidable list of diseases transmitted from time to time through the use of unprotected raw milk and cream.

While immunization in the prevention of undulant fever has not been effective, I am of the opinion that the use of bacterial vaccine for the cure of the disease is promising. After three years from the onset in my own case, I do not feel that I am entirely well. At the same time, a bacterial vaccine used in the early weeks of the disease seemed to be helpful. Several physicians in the State have reported good results, and others have reported no results at all.

A bacterial vaccine made from *Brucella melitensis*, variety bovine, was given to me intramuscularly for four consecutive days beginning with one-

fourth cc. and doubling the dose each day. For three months before the vaccine was given, the afternoon temperature had ranged from 101° to 103°. Following the administration of vaccine, the maximum temperature was less than 101° for a week, with the exception of one day. On the eighth day there was a rise and a daily rise was noted for two or three days; for that reason the vaccine was given again daily for six days in doses ranging from one-half cc. to one and three-fourths cc. The last dose was given on Saturday, September 14, 1929. There was no elevation of temperature on the next day and I have not had any since, with the exception of one day a week later when I had 99.2° for about two hours.

This bacterial vaccine for undulant fever is made by Jensen-Salsbery Laboratories, Kansas City, Missouri.

Dr. T. W. Kemmerer (Jackson): Dr. Clark has presented a very clear picture of a case of undulant fever and has discussed the disease very concisely. I wish simply to add a few words on the prevention of the disease and on a particular line of attack.

The prevention of undulant fever is dependent upon the elimination of its counterpart, Bang's disease or contagious abortion, in domestic animals. This can be done only by removing infected animals from the herds. The test for Bang's disease is the same as that for undulant fever. So far the State Board of Health has not instituted any regulatory measures, but the State Stock Sanitary Board has been conducting an educational campaign which is progressing very satisfactorily. This board offers its services in making the test when requested, the only requirement being that every animal reacting positively shall be branded with the letter A. This is to prevent infected animals from being transferred to other herds and thus spreading the infection.

From the standpoint of the stockman, animals infected with this disease are unprofitable. When the stockman and dairyman eliminate Bang's disease for purely economic reasons, then the problem of undulant fever in man is automatically solved. And it is better to accomplish results in this way than by compulsion on the part of the Board of Health. Of course the State Stock Sanitary Board will not be able to convince every dairyman or other stock owner that he cannot afford to have animals infected with Bang's disease in his herd. Whenever this educational work has made fair headway, however, then it will be time for the Board of Health to modify the Standard Milk Ordinance so that the requirements in regard to Bang's disease shall be the same as those in regard to tuberculosis, that is, that no milk shall be graded higher than D unless the herd is free from Bang's disease.

Of the tests made for Bang's disease on the dairy

herds of Mississippi, about 15 per cent were positive; another 15 per cent were suspicious. As a rule a large percentage of the suspicious later became positive.

Dr. W. A. Dearman (Long Beach): The etiology of undulant fever is well in hand, as well as the recognition of this disease, but a cure has not been effected. The prophylaxis is not on a sound basis. The most disappointing feature is delay in diagnosis. If there is anything that is heart-rending and that threatens the reputation of the physician who is trying to make an early diagnosis in these cases, it is having to wait ten days or two weeks for a positive agglutination test, with these patients in a state of anguish, and the physician in a state of doubt. I am hopeful that at some time we will have a specific remedy for undulant fever. I look upon it as an added infectious disease, with a course extending over a long period of time, with remissions and relapses.

I agree with Dr. Underwood that close scrutiny of the milk supply is very valuable. I think it will fall in line with the policies of the Board of Health to promulgate safe, sound and sane measures looking both to the prophylaxis of undulant fever, and to the oversight of the milk supply. Most milk-borne diseases spread with frightful rapidity, and the disease with its high morbidity penetrates to every place where milk is used. You can always trace a milk-borne disease and have conditions in hand in a short time, but I cannot understand why it is that Dr. Underwood, who I presume drank the same milk as his family—should have undulant fever and the other members escape. He says that his dairyman had 200 customers and three cases of undulant fever developed along the route. We have to throw up our hands, because we do not know when any of us may have undulant fever. Here is the chief executive of the Board of Health with undulant fever; physicians have amoebic dysentery; doctors have typhoid fever. Therefore, we as physicians, with the State Board of Health should not only try to prevent this disease, but to educate the patient lest sooner or later he will spread the disease, and finally succumb to the morbid process we are trying to fight.

Dr. F. Michael Smith (Vicksburg): I feel sure there is quite a bit about undulant fever that I do not know, and probably the profession does not know. Although a multitude of unproven evidence may sometimes confuse, yet some thoughts might be given that stimulate to greater investigation, and for that reason I will make some suggestions that are only theoretical, or a "hunch."

It has been my duty to have a number of dairy herds examined in one or two localities in this State and in other States. In this State we have had as many as 300 to 400 cows tested for the contagious abortion germ, with 40 to 50 per cent of

infection reported. At that time the entire output of milk from these various herds was consumed by the patronizing public, yet we had no cases of undulant fever reported in human beings. The amount of this milk pasteurized was very small. In no way do I want you to get the idea that I am saying there is no virtue in pasteurization, but rather in view of the proven facts in our limited knowledge it seems that universal pasteurization of milk would be the best prevention of human infection. Yet how are we going to explain the great amount of contagious abortus among these dairy herds furnishing raw drinking milk to many thousand people and no undulant fever reported over a period of years? In one locality every dairyman had over 40 or 50 per cent infection, and only one dairyman had a contagious abortus free herd.

I have this little "hunch", based on the teaching that a great degree of immunity has been established among our people to such diseases as meningococcic meningitis, tuberculosis, etc., by having frequently overcome infection occasioned by ingesting small doses received from missed cases or carriers. We are taught by some men that tuberculosis in childhood type is an asset, that if the child is treated or managed correctly it may develop an immunity that will protect it against later adult tuberculosis. I offer this suggestion: Is it possible that we have been drinking raw milk contaminated or infected with the abortus contagious germ and have been gradually fed minute immunizing doses against undulant fever? That the majority of us have built up a dependable immunity against undulant fever infection?

Dr. Leon S. Lippincott (Vicksburg): I am glad that Dr. Clark brought up this subject. It is very important, and a subject about which we know less than of a good many other conditions.

We recognize Dr. Kemmerer as an authority on the diagnosis of this disease in Mississippi, and I am wondering if he would be willing to give us a few words on the status of diagnostic tests at this time. They are not absolutely clear. I think it is generally agreed that if you can get a positive blood culture you are all right, but a positive blood culture in this disease is not easy to obtain; the organisms do not grow well. The agglutination test is not specific for undulant fever. It has been known to be positive for undulant fever in cases where there was no clinical undulant fever, but in which there were other clinical conditions which were definitely giving fever, and in which when the other conditions cleared up the agglutination test became negative. I think it would be well if we could have the present status of the diagnosis of this disease.

Dr. T. W. Kemmerer (Jackson): There is a great deal to be said about undulant fever, but I did not wish to make my discussion too extensive.

In regard to an explanation of why there are so few cases of undulant fever, I also have a theory. We know from experience that it is difficult to infect laboratory animals, using milk from cows infected with Bang's disease, when the milk is brought to the laboratory in the same manner in which it is delivered to the consumer. It appears that the bacillus abortus is readily killed by the growth of the organisms usually found in milk. For successful inoculation experiments, the milk must be handled in such a manner as to prevent the growth of other organisms. Under conditions which formerly prevailed in the handling of milk there was probably sufficient growth of other organisms, as a rule, to kill off the bacillus abortus. I believe that as sanitary conditions in the handling of milk improve there will be an increase in the number of cases of undulant fever except where Bang's disease is eliminated from the dairy herds or the milk is pasteurized. Universal pasteurization is the ultimate goal in the production of safe milk, but it cannot be put into effect at the present time.

As to diagnosis, there are difficulties in making any of the laboratory tests except the agglutination test. It is true that the agglutination test will fail to be positive in about six per cent of cases of undulant fever. But on the other hand blood cultures will be negative in a much larger percentage of cases unless the blood is drawn at just the right time. Isolation of the organisms from feces and urine is a rather difficult procedure, and will not be successful unless the specimen is collected and preserved properly. There is at times a cross-agglutination in the tests for undulant fever and tularemia, but the titre of the agglutination is usually decidedly higher for the existing disease. Moreover there would not be much difficulty in differentiating between the two diseases clinically. We have found no indications of cross-agglutination in tests for typhoid fever and undulant fever.

ARTIFICIAL PNEUMOTHORAX*

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Pulmonary tuberculosis begins in a great majority of cases as a small lesion and exists as such for a variable length of time before it spreads to the moderately advanced or far advanced state. If diagnosis is made during this earlier stage, and this is usually possible, proper treatment results, as a rule, in com-

plete clinical recovery. In far too many cases, however, the disease has reached an advanced stage before the diagnosis is made. While bed rest alone, over an adequate length of time, suffices to bring about a cure in most cases of early tuberculosis, even the most intensive rest is insufficient to bring about an arrest of the destructive process in more advanced cases with more wide-spread and destructive lesions and with the consequent increased incidence of complications; and the outlook for the latter becomes practically hopeless. In a limited number of such cases, some form of collapse therapy can be used with a fair degree of success. In the average sanatorium, artificial pneumothorax is indicated in less than ten per cent of cases.

Artificial pneumothorax, in the past two decades, has become recognized generally as a procedure of great value in the treatment of tuberculosis, and by its timely use many hopeless cases have been restored to health. The principles underlying this method of treatment are simple. As in other diseases, rest of the affected part facilitates recovery. Bed rest is of benefit in pulmonary disease because, at complete bodily rest, the movement of the lungs is reduced to a minimum, and, with this limited motion, healing can take place fairly readily. If the minimal movement of the lungs which is brought about by bed rest is still insufficient to permit healing of the more advanced disease, artificial collapse, such as is produced by pneumothorax, reduces still further the motion of the diseased lung, and healing then becomes possible. This is the aim of artificial pneumothorax. The diseased lung is thus splinted, as it were, so that the maximum amount of local rest can be secured. Rest, the most important single factor in the treatment of any form of tuberculosis, is thus intensified by pneumothorax.

The beneficial effects of artificial pneumothorax are many. In addition to the arrest of movement of the affected lung, there are other mechanical effects. The walls of cavities are approximated so that healing becomes possible, and exudates in the lungs

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and bronchi are squeezed out as from a sponge. Reflected in the clinical picture even more noticeably, however, are the serological effects. Lymph flow is checked in the collapsed lung so that absorption of the tuberculo-toxins ceases almost at once, and symptoms resulting from this absorption are ameliorated correspondingly. The fever subsides, the night sweats cease, the appetite returns, digestion improves, the weight increases, and the sick, discouraged patient becomes brighter, more cheerful, and filled with renewed courage and hope. Spread of the disease is checked not only in the collapsed lung but also in the contralateral lung. The cessation of the toxic absorption checks the focal reaction which result in all other tuberculous lesions, and the vicious circle which thus operates to spread the disease is broken. Lesions in the better lung can then more readily heal.

The indications for the employment of artificial pneumothorax are fairly definite if the principle underlying its use are understood and the pathological variations of tuberculosis borne in mind. The classical case for pneumothorax is the one with moderately advanced, unilateral disease, which does not improve after a fair trial on strict sanatorium regimen, whether cavitation is present or not. Unilateral disease, when limited to the upper lobe and without cavitation, usually responds to strict rest treatment, and one should not be too hasty in instituting pneumothorax in these cases. It is a sound general principle that every case should be observed for a period of one to six months under strict sanatorium treatment before pneumothorax is decided upon.

It must be borne in mind, however, that tuberculosis does not often advance far in one lung before it becomes bilateral, and strictly unilateral cases are rather rare. If the lesion in the latter lung is not too extensive and too active, and if it is limited to the upper lobe, collapse of the badly diseased lung may be of great benefit. I have been amazed at the improvement noted in rather extensive lesions in the contralateral lung where good collapse was established. That

the extent and type of the lesion must be studied carefully both by physical examination and by stereoroentgenograms before considering pneumothorax, goes without saying.

Cavities larger than four centimeters in diameter do not often heal spontaneously and, when present, especially if in the lower lobe, should be considered indications for the induction of pneumothorax. Lower lobe lesions, in general, if definitely proved to be tuberculosis, are probably best treated by pneumothorax because of the poorer prognosis usually attending lesions in this location treated by bed rest alone. Too much time should not be wasted in an attempt to secure arrest by conservative measures in these lesions because of the tendency of large cavities to become thick-walled, making their collapse difficult, and because of the likelihood of early formation of pleural adhesions in lower lobe lesions.

Hemoptysis is often a real indication for pneumothorax, although here disappointment often results as the collapse does not always check the hemorrhage. One of my patients, being treated by pneumothorax, suffered a fatal hemoptysis from the collapsed lung. If the hemorrhage cannot be checked rather readily by usual means, pneumothorax should be tried, for, by it, oftentimes copious hemorrhages can be arrested. It must be remembered, however, that most hemoptysis stops spontaneously, and pneumothorax may not always be responsible. A patient under my care was given artificial pneumothorax to control a severe hemorrhage. The bleeding stopped promptly. The pneumothorax was maintained, but after a few months she had several severe hemorrhages from the same lung which could not be controlled by pneumothorax. Because of the danger of examining patients during hemoptysis, it may be difficult to decide from which lung the blood is coming if the condition of the lungs is not known from previous examination. The patient himself can usually tell fairly accurately the source of the bleeding, and in an emergency, his statement can generally be relied upon.

The use of artificial pneumothorax for re-

placement of large pleural effusions is frequently advocated. In my opinion, pneumothorax is not indicated in such cases. In the majority of instances of pleural effusion, there is very little underlying lung pathology, and pneumothorax, in such cases, is likely to result in marked thickening of the visceral pleura with the lung collapsed. With this thickened pleura, the lung is incapable of reexpansion. It is my policy to avoid, very carefully, allowing air to enter the chest when aspirating a pleural effusion.

Lung abscess may be benefitted occasionally by pneumothorax if the abscess is single and draining into a bronchus. Attempt at inducing pneumothorax in a peripherally located abscess may result disastrously in the interference with bronchial drainage and in the rupture of the visceral pleura, producing empyema. As a rule, if it is possible to secure drainage of the lung abscess in any other way, whether by surgery or bronchoscopy or by postural drainage alone, I believe that better results can be expected than by artificial pneumothorax.

Bronchiectasis is another non-tuberculous disease which occasionally lends itself to artificial pneumothorax treatment. Unfortunately, this disease is nearly always bilateral and of long standing before the diagnosis is made, and pleural adhesions over the involved lobes are the rule rather than the exception. An attempt at pneumothorax should be made, however, as any relief for the unfortunate victims of this condition is welcome indeed.

The contraindications to artificial pneumothorax are few and definite. Of great importance is the condition of the contralateral lung. If the extent of the lesion is more than one-third and the character chronic in nature, or more than one-sixth and more active, or if the disease be scattered or localized and contain cavities, pneumothorax is contraindicated in the opposite lung as a general rule. If the lesion is of a pneumonic type or involve the lower lobe, the other lung should not be collapsed.

Far advanced tuberculous enteritis with depleting diarrhea and cachexia is usually

considered a contraindication, and extensive laryngeal involvement with dysphagia and extension to the pharynx should likewise be so regarded. These complications usually represent a total lack of resistance on the part of the patient and are really parts of the end stage. Intestinal involvement diagnosed in earlier stages, however, and the more chronic, less extensive laryngeal lesions are not contraindications and may frequently be benefitted by the collapse of a badly diseased lung.

Diseases of the heart and kidneys usually contraindicate pneumothorax. With these conditions, patients do not well tolerate deprivation of breathing area of one lung. Patients past fifty with the myocardial weakness and arteriosclerotic changes and with the rigid chest walls incident to age are poor subjects and should rarely, if ever, be given pneumothorax.

Emphysema and asthma or dyspnea from any cause, unless toxic, should always be considered contraindications. The same may be said of cyanosis. An enfeebled mental state or very evident neurasthenia often makes pneumothorax inadvisable also.

There are several types of apparatus on the market for administering artificial pneumothorax, but they are all based on the same principle. The one most commonly used in this country is the old Robinson apparatus. This has a water manometer for measuring the intrathoracic pressure and two fairly large, graduated bottles connected by tubing in such a way that water flowing from one by siphonage forces an equal amount of air from the other into the chest.

The operation is not difficult, and little harm can be done if the principles are understood. The initial filling demands greatest care, however, and should not be attempted by anyone who has not thoroughly studied the procedure and acquainted himself with its dangers. The patient, if nervous or if unable to control cough, should be given a preliminary hypodermic of codein. He is placed on the operating table on the good side. If necessary to separate the interspaces, a rolled sheet may be placed under

his chest. The pillow should be removed so that the head is lower than the chest. This is said to lessen the likelihood of air embolism. Employing strict asepsis, the operator anesthetizes the point selected for puncture by novocain solution using a small sharp needle for the skin and a longer one for the pleura. Care should be taken to avoid the intercostal nerve, and the operator should proceed slowly with the novocain injection to produce a minimum amount of pain. The parietal pleura is especially sensitive and must be well anesthetized, care being taken to avoid puncturing it with the sharp needle. By means of a sharp pointed knife, the skin is nicked so as to permit the passage of the larger, short beveled needle with a minimum amount of pressure. The needle I prefer for this purpose is a medium sized, spinal puncture needle cut off so that it is about two inches long. The Brauer-Floyd-Robinson needle is preferred by some and may be more desirable for the beginner, but it is somewhat cumbersome and not necessary if one be careful in the use of a straight needle. The needle is forced gently through the chest wall until it is felt to pass through the pleura. The stylette is removed, and the tube leading to the manometer is quickly connected. Careful manipulation of the needle will enable the operator to find the free pleural space if this is present. The presence of a free space will be indicated at once by the excursions of the column of water in the manometer which signify a negative pressure both upon inspiration and expiration. If wide fluctuation is noted, the reservoir is connected by means of the stop-cock, and with the water on the same level in the two bottles, the air is permitted to be drawn in by collapse of the elastic lung. Under no circumstances should air be forced in at this point. If a free space is present, the air will flow in with ease. The manometer must be watched for the effects of the air upon the intrathoracic pressure. At the first operation, two hundred to four hundred cubic centimeters of air are given, the amount varying with the size of the chest and the effect upon intrathoracic pressure. Only

when given to control hemorrhage should more than this amount be given the first time. The immediate effects of the initial dose may be slight, although the majority of patients will develop a rather painful pleurisy on the affected side, and there may be a rise of temperature and pulse rate for a day or so. There is usually also a temporary increase in expectoration.

It is generally considered that the normal pleura will absorb air at the rate of about 100 cc. per day so that on the second or third day the second refill must be given. The amount of air is increased if it does not raise the intrathoracic pressure too greatly, and refills are given at gradually increasing intervals up to one week apart. The frequency with which refills are given depends upon the amount of air required to bring the pressure to the point desired. It is better to give small amounts at rather frequent intervals than to allow large amounts to be absorbed before refilling. It will be found that the capacity of the pleura to absorb air gradually diminishes so that refills are needed less often as time goes on.

The length of time over which artificial pneumothorax should be continued varies with the individual case. Only exceptionally should it be discontinued under a year, and, in most cases, it will be found necessary to keep it up for one to five years, or even longer, to secure an arrest of the disease. I have had one case, who, after five years of pneumothorax, had symptoms of toxemia when he allowed too much of the air to be absorbed without a refill. It must be remembered that once the lung has been allowed to expand to the chest wall, it becomes firmly adherent so that subsequent pneumothorax is no longer possible.

There are several factors that interfere with the success of artificial pneumothorax therapy. Chief among these, perhaps, is adhesive pleurisy. Obliteration of the pleural space by adhesions render pneumothorax impossible. There is no definite way of detecting the presence of pleural adhesions before attempting pneumothorax, and one

never knows when they are present until one tries to find a free space.

Pleural adhesions may be present only in spots over the lung so that while a free space is encountered at once, there can be obtained only a partial collapse. The operator is appraised of this condition by observing that only a small amount of air will raise the intrathoracic pressure materially. Even partial pneumothorax is often of great benefit and may serve to relieve symptoms or collapse cavities and should be kept up if this be the case. It is highly dangerous to attempt to break up adhesions by high intrathoracic pressure, and, in my opinion, it is never justified. I believe those who attempt it are not familiar with the futility of the procedure as well as the dangers incident to the attempt. If adhesions prevent satisfactory pneumothorax, then another form of collapse therapy is indicated.

Often, large, thick-walled cavities will not collapse even in the absence of pleural adhesions. This fact frequently accounts for the failure of pneumothorax to prevent or check hemoptysis. Cavities are always a menace, and unless they are obliterated, healing is impossible.

A frequent cause of unsuccessful pneumothorax is the spread of disease in the better lung. Such a situation is always discouraging, and, when it occurs, demands careful exercise of judgment in the best course of procedure. Pneumothorax may have to be discontinued, but in my experience, unless the spread is rapid, it is best handled by continuing the pneumothorax with low pressure and placing the patient on strictest bed rest. Progressive disease in the better lung certainly accounts for many pneumothorax failures.

In addition to these unfortunate conditions, there are many complications incident to the administration of artificial pneumothorax. The most common of these is pleural effusion, which occurs in varying amounts in more than half of the cases under treatment. The direct cause of this complication is a matter of speculation. If it occur in small amounts as a thin, cell-poor effusion, it causes no

trouble and requires no treatment. These effusions are frequently transient.

Not infrequently, the fluid occurs in larger quantities, however, and produces symptoms which necessitate its removal. It is usually thicker, slightly turbid, and it tends to recur, requiring frequent aspiration over a long period of time. I have under my care at present a patient who has had this type of effusion complicating her pneumothorax for over a year with no indication of its subsiding. It is true that this fluid keeps the lung collapsed just as would the air, but there is the objection that in the presence of this fluid the visceral pleura becomes so thick that reexpansion of the lung becomes impossible after healing takes place. This fact might not constitute a serious objection if there were originally a destructive lesion in the lung, but the inability of the lung to reexpand is usually accompanied by a certain amount of thoracic deformity.

In about ten per cent of patients taking pneumothorax, empyema occurs. This is a rather serious complication, especially if a bronchial fistula develops. The pus in the closed cavity usually contains only tubercle bacilli and is best treated by frequent aspiration. Thoracotomy should not be performed, as a rule.

In rare instances, artificial pneumothorax is complicated by pleural effusion or even spontaneous pneumothorax in the opposite lung. When either occurs, prompt action is necessary to save life.

One frequently hears of pleural shock and air embolism which complicate pneumothorax. These conditions, fortunately, are rare, but they do occur. The mechanism of their production is not clear, the details concerning the methods employed in administering the pneumothorax usually being omitted from the cases reported. Preliminary hypodermics in the highly nervous patients, thorough anesthetizing of the pleura, careful insertion of the needle, being sure a free space is entered before allowing air to flow in, keeping the patient's head lower than his chest, and avoiding pressure in administering the air are factors which may help us to avoid these

alarming and even fatal accidents. Even with all these precautions, however, they sometimes occur.

Artificial pneumothorax is valuable without question, yet it is a procedure that must be used with great care and only after it has been thoroughly studied. It must be remembered that it is an adjunct to, and can by no means be expected to replace, the time-honored, general rest cure. Its failures and its limitations are many, and the cures produced by it are relatively few, but its value can be appreciated when we consider that most of the patients who are treated by this means are practically hopeless without it.

Tuberculosis is a costly disease from the standpoint of time and money, and pneumothorax makes it even costlier. Its employment demands untold patience on the part of both the patient and the physician. But the treatment for tuberculosis, as for syphilis and many other chronic diseases, must be continued indefinitely and relentlessly.

SUMMARY

1. Most cases of tuberculosis diagnosed in the early stage respond satisfactorily to rest treatment; a limited number of the more advanced cases can be benefitted by artificial pneumothorax.

2. Pneumothorax immobilizes the lung, collapses cavities, and prevents absorption of tuberculo-toxins, relieving symptoms and permitting healing.

3. It is indicated (a) in cases in which the disease is largely limited to one lung which does not respond to rest alone, (b) in cavities which show no tendency to heal, (c) in hemoptysis, and occasionally (d) in lung abscess and (e) bronchiectasis. It is rarely, if ever, indicated in pleurisy with effusion.

4. It is contraindicated (a) in cases in which there is extensive disease in the better lung, (b) in advanced enteritis and (c) extensive laryngitis, (d) in the presence of heart and kidney disease, (e) in elderly patients, (f) in asthma, emphysema, and cyanosis, and (g) in neurasthenia.

5. The technic of administering pneumothorax is not difficult but must be thoroughly understood before it is attempted.

6. Pneumothorax must be kept up at least a year, and in most cases, two to five years or longer.

7. Factors interfering with successful collapse are pleural adhesions, thick-walled cavities, and extension of the disease in the contralateral lung.

8. Complications incident to pneumothorax are pleural effusion, empyema, pleural shock, air embolism, and pleural effusion or spontaneous pneumothorax on the opposite side.

9. Artificial pneumothorax has its dangers, limitations, and disadvantages, but it is a procedure of great value in selected cases of pulmonary tuberculosis.

DISCUSSION

Dr. R. E. Schwartz (Hattiesburg): Dr. Strain covered most of the main phases of this subject, and what happens in artificial pneumothorax. This question, discussed by those working in tuberculosis, brings up various opinions as to when it is indicated. They agree on all the major points brought out in the paper, but each case of tuberculosis requires careful study over a period from three weeks to maybe three months to determine whether that individual requires pneumothorax. We have several things that contraindicate pneumothorax, such as extra-pulmonary lesions of severe enough degree to produce death. In instances like that we should not use pneumothorax. However, in cases of tuberculous enteritis that is not very severe, I have seen pneumothorax improve the enteritis as well as the pulmonary condition. In laryngeal tuberculosis we have found cases where pneumothorax had to be instituted for other reasons, and in several instances the patient improved. In most cases of laryngeal tuberculosis there is some trouble remaining even after it is arrested, so it is hard to say, when not to give pneumothorax except where there is no pain. As to cases of heart and kidney trouble: in many cases these patients insist, although they know it is contraindicated in those conditions, but they feel it is their only chance and they will request the physician at the sanatorium to give them the chance by pneumothorax.

We try to educate our patients by lectures and pamphlets as to every phase of tuberculosis, as we think they will give us better cooperation in the treatment of the disease. In some of these cases they fight against the use of pneumothorax, but in most instances we have seen improvement.

As to old age, we recently had a man 96 years of age who had been in a sanatorium for several years, but had then been out for a few years. He

had several hemorrhages and we tried pneumothorax. He has shortness of breath. But the air stopped the hemorrhage and the chances are it will prolong his life a few months. But in old age with shortness of breath they need all the air space possible, and when you cut it out they gasp for breath.

There are a number of contraindications for pneumothorax, but there are exceptions to all of them. There are dangers, and I think most of us who use pneumothorax consider ourselves fortunate if we do not get dangerous complications, for instance, gas emboli. We had a case, a man who walked into the room laughing and in a few minutes was dead from gas emboli. The man who gave it was an experienced man. In another instance, one of the instructors in a large mid-west medical college, an authority on chest surgery—I presume he has given more pneumothoraces than any other one man,—was demonstrating before a class, using a doctor's wife as the patient, and she died of air embolism. So that no matter how experienced we may be in giving pneumothorax, we never know when that complication may occur.

Another dangerous complication is spontaneous pneumothorax. It is one of the hardest things to handle following pneumothorax in any type of tuberculosis. It usually occurs from giving too much pressure, tearing adhesions loose and rupturing the lung. A large percentage recover, but the after care determines that.

Some authorities claim that pleurisy with effusion occurs in approximately 75 per cent of cases of pneumothoraces. We have found that where proper technic is used, not giving too much air at a time and giving it frequently, it occurs in less than 35 per cent.

As to the time, we may wait too long rather than give it too early. Study your patients carefully and do not put them off too long, because that is the main danger, and in the long run the early treatment is the more economical.

Dr. W. A. Toomer, (Tupelo): In the treatment of tuberculosis there have been a great many remedies suggested other than rest, fresh air, sunshine, etc. The majority of these remedies have failed. Pneumothorax has survived the test of time.

Before attempting to use pneumothorax I think we should study the chest very thoroughly; study it under the fluoroscope, also stereo plates, and especially note the position of the heart, as very often it is pulled out of position by adhesions and contractions. Unfortunately, the cases in which we want to use pneumothorax have pleural adhesions which interfere with its use.

As to the amount of air injected, at the first time I rarely ever use more than 50 to 100 cc. We find the patient has much less pain and discomfort

if it is given in small amounts at frequent intervals.

The question may arise as to giving pneumothorax in the left chest. I do not think it is contraindicated on the left side unless the heart is enlarged greatly. As to the amount of pressure, I believe the best results are had where the smallest amount of pressure is used that will give the desired results. If you keep the lungs completely collapsed over a long period of time you will have a dense mass which will not re-expand. In the ordinary case use just enough pressure to hold the lung as if it were splinted. Cases with large cavities usually require complete collapse.

In general practice the use of pneumothorax is very unsatisfactory because of the impossibility of checking up on the case, as is necessary as you go along with the treatment. Of course its main use is confined to practice in sanatoriums.

Recently I saw a patient that had been given pneumothorax in the left chest for several years. She had a complete collapse of this lung. And two or three days before I saw this patient she had begun to have considerable discomfort and difficulty in breathing. A roentgenogram was made and we found that the mediastinal structures had been pushed over to the collapsed side. We re-filled the chest and the patient was comfortable. The compensatory expansion of the right lung had pushed the mediastinum over to the left side. The air had been gradually absorbed and the collapsed lung could not re-expand. Her only chance is to have pneumothorax given her as long as she lives or have a thorocoplasty done.

Another case was one of pulmonary hemorrhage. This man had been diagnosed quiescent tuberculosis for a number of years. He had a large pulmonary hemorrhage and I saw him five or six days after he began bleeding and he was still bleeding rather freely. Temperature was 104°. Heart action rapid. He had a severe congestion throughout both lungs. And he was too weak to stand the loss of any more blood, so we decided to give him pneumothorax; 400 cc. was given into the left chest and the hemorrhage was promptly controlled. I advised against the further use of pneumothorax in this case unless it was absolutely necessary to control the hemorrhage. But for some reason this patient was given 800 cc. of air on the third day. I saw him again next day when I found him cyanotic, temperature 103°, rapid pulse and considerable inflammation throughout both lungs. Patient died in three or four days. I mentioned this case to emphasize the fact that it is a dangerous procedure to give pneumothorax where we have a generalized inflammatory condition in both lungs.

Pneumothorax is of great value in the treatment of well selected cases of tuberculosis and should only be used where it can be given by men who are accustomed to it use.

THE MODERN CONCEPT OF THE DIAGNOSIS OF ORAL PATHOLOGY*

SIDNEY L. TIBLIER, D. D. S.

NEW ORLEANS

I feel honored indeed to appear before the Society to address you on a subject which at first might seem foreign to most of you, but which I believe has directly or indirectly a bearing on every phase of medical practice.

Many years ago, dentistry, which then concerned itself chiefly with artificial restoration of parts lost through disease or through crude surgical procedures, was forced to make its own way. The splendid dental schools in the universities, the magnificent dental clinics, the active programs of public dental health education, and the American Dental Association with its 50,000 members are all evidence of the fact that dentistry has made good.

That dentistry has evolved is an undeniable fact although much of the progress, it is true, was along mechanical lines. Technics have been perfected and I think it can safely be asserted that nowhere in the human body can restorations by artificial means be made of lost organs that will simulate dental restorations in the way of esthetics, efficiency and comfort. But withal dentistry has evolved also along other lines. Research in dentistry has delved into the causes of the diseases resulting in loss of teeth. This research was stimulated when not so long ago scathing indictments were made against American dentistry particularly in that it paid no attention to disease conditions existing in the mouth as a common cause of systemic disease. It is important and interesting to note that Hunter's criticisms were directed to the conditions of oral sepsis in neglected mouths and from poor dental restorations. He referred to these "gold traps of sepsis", and in his pronouncements spoke of the use of antiseptic mouth washes for eliminating the infections but he did not, however, say anything regarding the most common form of oral pathology, most liable to produce systemic disease, i. e. infections located in the bone at the apices of teeth

whose toxic products drain directly into the circulation.

This was the turning point, however. The advent of the radiogram was principally responsible for this change. The modern concept of oral pathology can be based upon the simple classification of tooth diseases as outlined by the eminent oral roentgenologist, Dr. Howard R. Raper, of Albuquerque, N. M. Dr. Raper separates tooth diseases into four different stages.

1. The involvement of the enamel by decay.
2. The involvement of the dentine.
3. The involvement of the pulp.
4. The involvement of the surrounding, supporting bone.

And why this classification? Up to the present time, no histologist or physiologist has been able to demonstrate conclusively that a definite circulation exists in the enamel of a tooth. In view of this present knowledge of the enamel, dentistry holds that the diagnosis and treatment of enamel disease is relatively simple and these operations constitute, in great measure, so called preventive dentistry. Circulation (not blood, however) does exist in the dentine, and blood and lymphatic circulations exist in the pulp and periodontal membrane and therefore one is forced to consider the tooth as a living entity and consider it just as all other organs are considered; namely, in terms of its histologic structure and the circulating tissue, the blood, by which its condition of health or disease is greatly determined.

As soon as disease in teeth reaches the second stage we already have a relationship existing between that diseased area and the rest of the body. This concept has also stimulated research into the problem of the cause of decay. We must still cling to the theory that it is an infectious process beginning on the surface of the teeth, and that since circulation is present in the dentin that predisposition to decay is determined by many other factors such as diet, faulty metabolism, glandular disfunction, etc., which in turn permit of salivary secretions not inhibitory but rather favorable to the growth and activity of the microorganisms involved in caries.

Then decay reaches the third stage; namely, of pulp involvement—the resistance of this tissue is practically nil. Its capillary circulation,

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with only minute foramina at the ends of the roots to admit of circulation, easily becomes congested from irritation and the pulp dies from strangulation. Gangrene results and the products of putrefaction, most of them gaseous in nature, force themselves as well as solid infected materials into the bone at the apices of the teeth and the fourth stage, i. e., bone involvement, results. But this is not the only way in which bone disease around teeth manifests itself. Infection beginning at the gingival crevice causes pocket formation or periodontoclasia and known as pyorrhea.

Then also we have the peculiar infections arising from unerupted, partially unerupted and impacted teeth and all the more serious complications arising from these sources.

The modern concept of oral diagnosis cannot be divorced from the idea of diagnosis of disease of any other part of the body.

Exciting and predisposing causes must be determined to make a complete diagnosis. Too little attention has been paid in the past to the predisposition of teeth and jaw structure to disease with the result that teeth are filled. The restorations might be beautiful and efficient but in a very short time the work is rendered valueless because nothing is done at the time of restoration, or during the period following, towards determining systemic causes and eliminating them.

The plea that I would make to you as physicians is for a more intense interest in the problems of the dentist, for his problems do not stop in the mouth. He looks to you for help in diagnosing and eradicating the systemic factors involved in mouth disease. The dentist today is thoroughly trained in the fundamental medical sciences, but he is also taught that co-operation with the physician is best for the patient and both professions.

We cannot speak about diagnosis without a word about focal infection. That infected areas about teeth cause secondary troubles is admitted by all but should we not give some thought to the other picture, so often present, but not recognized, that the teeth and their surrounding structures have become diseased as secondary infections, the primary source being in a gall

bladder, appendix, prostate, or colon, and thus we have the vicious circle.

Dr. Mead in his work entitled "Diseases of the Mouth" suggests a list of steps to be considered in oral examination so that accurate and positive diagnosis can be made.

1. Complaint.
2. History.
3. Manifestations of pain.
4. General oral examination.
5. Percussion and palpation.
6. Exploration.
7. Color.
8. Conductivity of temperature.
9. Transillumination.
10. Radiograms.
11. Pulp testing by electric current.
12. Bacteriologic examination.
13. Histopathologic examination.
14. Blood examination.
15. Urinalysis.
16. Serologic test.
17. Differential diagnosis.
18. Treatment recommended.

Evidently these eighteen steps need not be carried out for every patient, but in those cases of patients suffering with obscure trouble and where the etiology of a well recognized lesion is obscure this full oral examination is essential.

A number of these steps should be carried out by the physician or clinical laboratory pathologist; namely, the bacteriologic, the histopathologic and blood examinations, urinalysis, serologic test.

Among the steps to be carried out by the dentists one stands out particularly, the radiographic examination. This has been and still is a subject of controversy. I am of the opinion that the radiogram without clinical examination, vitality tests, and exploration and transillumination is inaccurate. And again, radiograms made without first making at least a superficial examination of the oral cavity are seldom satisfactory as radiograms, and attempts to read infection and pus in radiograms is unscientific.

Good radiograms of all teeth and spaces are invaluable for diagnosis, but alone they are often misleading. Many a good tooth has been sacrificed and many a diseased tooth is allowed to remain due to faulty radiographic technic

and the failure to make several exposures of certain teeth, especially upper molars and bicuspids, at different angles before diagnosis is made. Much of the research work in dental radiography in the past few years has been devoted to that one phase. Dr. Clarence Simpson of St. Louis at the last meeting of the A. D. A. devoted one whole morning session to a consideration and study of roentgenograms some of which were reported as showing bone pathology and others negative, which teeth and bone when rereayed at different angles showed distinctly and conclusively the errors made by depending upon just one exposure for interpretation.

The modern concept, then, of oral diagnosis requires a division of labor. I believe the medical profession recognizes the value of accurate and complete oral diagnoses, and that the dentist should be the one to finally determine the procedures to be undertaken in the mouth.

This is the spirit that will make for progress, and a better and still more scientific appreciation of this important field of work.

DISCUSSION

Dr. Homer Dupuy: This splendid presentation shows the remarkable strides made by modern dentistry. The outstanding statement made by Dr. Tiblier: that not only do teeth cause focal infections in distant organs, but, that distant organs, such as the prostate, appendix, may cause secondary infections of the teeth, this is a new viewpoint worthy of attention. I discuss the question from the antrum side. In 1919, I was among the first in this section to stress that the antrum often-times acted as a reservoir, a cesspool, for pus troubles in the upper nasal sinuses. For many years we have been correctly teaching that teeth do cause antrum disease. I will show pictures proving that due to anatomical anomalies we have a reversed condition, in which long-standing pus in the antrum may, and does, cause teeth infection. We can back this up by roentgenogram, clinical findings, and operative experience. Tiblier's contribution is illuminating.

Dr. Wahl: I want to compliment Dr. Tiblier on his paper and the very new thought he has brought out. I do not believe I have ever heard anybody say that a bad appendix or a bad gall bladder would cause infected teeth. I do not believe anything of that sort is on record, not to my knowledge anyway.

I should think, of course, if a patient had a bad gall bladder, etc., it might lower his resistance to such an extent that the teeth might be neglected

and be prone to decay more easily than otherwise. Naturally, too, if they were neglected to any extent, these pathologic conditions would be present. I also want to say that, although I have all the respect in the world for Dr. Dupuy, I do not believe that a diseased antrum will cause infected teeth unless that antral cavity has been so diseased as to become malignant or to such a severe extent as to become necrotic and cause devitalization of the pulp which in turn might become infected. I will say a great many antral operations have ruined quite a number of good teeth. I have also seen more bad teeth ruin antra than antra have ever ruined teeth. I have had a bad antrum for many and many a year, and it was the result of a first molar which had been devitalized and poorly treated. The rest of the teeth on that side of my head are sound, so that I cannot see that the theory has any foundation.

Dr. Tiblier brought out a good many points that would take all night to speak about. The most important point is early dental diagnosis. Early dental diagnosis is as important to medical men as the medical examination is to the dentist, and if we both co-operate and carry the idea out, we will be more successful.

Dr. F. M. Johns: Many problems are presented by Dr. Tiblier's paper, only one of which I desire to discuss.

The earliest evidence of dental disease as shown by the doctor is the occurrence of enamel decay. I have had occasion to study from the laboratory standpoint the blood and saliva from numerous cases of erosion and have concluded that the presence of localized areas of erosion was usually due to structural defects in the chemical composition of the dentine formed long before the eruption of the tooth. Of course, in certain instances of malocclusion definite acids are produced by infection of decaying food material that dissolves the enamel in direct contact with such a process. Elsewhere, however, one would think that solution of the calcium and phosphorus of the enamel would proceed evenly. If we place a tooth in a bottle of acid this dissolution does proceed evenly.

Calcium and phosphorus contents of both blood and saliva of persons showing badly eroded teeth are almost invariably normal.

In collaboration with several dentists, notably Dr. Haidee Weeks, I have studied the calcium metabolism of a number of children during the time the permanent teeth were in process of formation. In many instances profound changes in the calcium-phosphorus contents of both blood and saliva could be demonstrated in children whose first set of teeth (baby teeth) were not up to normal.

I think that one of the valuable lessons to be learned from any such observations of these is that as far as prophylaxis is concerned the most

vital thing in the prevention of dental erosions is the proper adjustment of the young child's diet.

Dr. Lurie: As was brought out by the essayist tonight, dentistry has evolved itself from an exogenous profession, a profession of repairs, incidental repairs, to the present-day profession involving endogenous conditions and the prevention of local and systemic pathological conditions. This will perhaps add a little light to the discussion we have heard to-night and dentistry's interest in which comes first, infected antra or teeth.

It is quite possible for a process involving the antrum to cause involvement of teeth just as easily as it was shown that a process about the teeth will involve the antrum. Any process that causes a congestion of the membranes of the antrum causes congestion of the pulpal contents of a tooth. This very congestion, as was shown by the essayist, interferes with circulation within the teeth because of the resistant walls of the root canals. The pulp subsequently dies from a continued congestion.

And, as again was shown, death of pulp causes putrefaction, causes gas formation, which in turn cannot come out through the body of the tooth or through a filled cavity, and it is backed up into the system. We ought to appreciate just what that infection within the pulp, that putrefied material within the pulp, is worth to the system and what it may cause. It is true that many a tooth that is badly involved presents no local symptoms, but it may be a possible cause of a great amount of systemic derangement. We look to dentistry for the correction of these conditions. We look to preventive dentistry to correct these conditions before they develop, and it is for that development I want to congratulate the dentistry of today.

As I said a few weeks ago, this subject is too broad to be taken up by an individual paper at one meeting, but should be discussed from many angles. I suggest again that we devote an entire evening to the subject.

Dr. R. Lyons: I feel that we ought to congratulate the essayist on his excellent paper. There is one point brought out that interested me particularly and that was the roentgen examination of the teeth. We have all had the experience that Dr. Tiblier has mentioned, of having films made of the teeth, which are returned to us perfectly normal. But a film made by someone else discloses a diseased root. We now realize the reason for it. I do believe that the main trouble is that when we send our patients to the radiologist to have a film made, the radiologist is not conversant with the condition of the teeth and the details in the mouth and he, or rather his technician, makes a stereotyped film of it which may or may not show defects. The dentist is familiar with the mouth and will go to far more trouble. I do not mean the radiologist

will not do it if we ask him, but he has not the same interest that the dentist has. By making a number of films of a single tooth, we can find the trouble. I have had this experience a number of times.

In answer to Dr. Wahl's objection to what I said about teeth becoming secondarily involved, I want to convey the idea that very often we see cases in which the teeth have been properly treated, the pulps are removed and the root canals are properly filled and for years the teeth seem to go on without any radiographic evidence of apical disturbance. After several years, when these patients succumb to some other trouble such as appendicitis, colitis, etc., the teeth and their adjacent structures are vulnerable spots and they can become infected just as any other organ can become secondarily involved. I did not mean to convey the idea that, for instance, an appendicitis or colitis will cause infection or decay of normal vital teeth.

I was also pleased to have Dr. Lyons agree with me about the question of the dental radiograms as made by men who are interested only in general radiography. Many make good films, there is no question about that, but often errors are made in following just an ordinary routine in making each film, and secondly, in interpreting the films without clinical examinations.

By blindly following a routine technic, without regard to the variations in anatomic structure or the nature of dental restorations present, serious errors are made; poor films are the result and interpretation is impossible.

I want to emphasize the fact that the upper bicuspid and molar region particularly have many adjacent anatomic structures subject to variation, that will interfere seriously with the making of good films; varying the angles of projection is necessary to obtain good results. The antrum and the malar process especially present difficulties in these regions. The trifurcations of upper molars require sometimes three or four exposures to study the apical condition of each root.

The radiodontic examination should be coupled with the clinical findings. As dentists we insist that this is necessary, and I believe that after careful consideration the medical men would unanimously agree with us. It is impossible to arrive at a definite conclusion about mouth pathology without correlating the two.

What do dentists think about vitamins? There was a time, not so long ago, when dentists went wild on this question of vitamins and diet, just as many practitioners of medicine did. We recognize today, as far as teeth are concerned, that after all the question of vitamins and diet is a question of calcium and phosphorus metabolism. It is certainly a factor in the formation and maintenance of good teeth, but after all it is only one factor.

Endocrine function, power of assimilation, heredity, environment all play a part in the problem of health or disease of oral tissues. We know that the balance of calcium and phosphorus is essential for the teeth. Dr. Johns brought out this essential point. We have to be particularly careful about the calcium and phosphorus intake and the vitamins necessary for their assimilation during the time the teeth are beginning the process of formation.

And this period extends from the seventh week to the seventeenth week of foetal life for the temporary teeth; all of the permanent teeth with the exception of the second and third molars begin forming before birth. It is essential then that the pregnant mother receive proper attention as regards vitamins and diet to insure good teeth for the developing child as well as to protect her own teeth against decalcification and decay. This is another problem in which there should be more co-operation between the physician and dentist.

SOME ETIOLOGICAL FACTORS IN PERIODONTOCLASIA, ITS PROG- NOSIS AND TREATMENT*

LEO J. SCHOENY, D. D. S.

NEW ORLEANS

The purpose of this paper is to arouse in the minds of the rank and file in both Medical and Dental Professions a greater interest in this very serious oral disease, and to encourage the medical and dental practitioner to learn to recognize this condition in its very incipency so that corrective measures may be instituted early and the infection eliminated before a general systemic involvement is brought about.

Pyorrhea, periodontitis, paradentosis or periodontoclasia, which latter is really the term most generally accepted today, is a very common affliction of mankind and is now recognized by the leading minds in the dental and medical professions as being responsible for a certain percentage of our general systemic disorders. We all realize oral foci of infection are frequently responsible for such conditions as arthritis, endocarditis, myocarditis and nephritis, just as are infected tonsils or chronic suppuration in other parts of the body. Some of our leading obstetricians contend many complications dur-

ing pregnancy can be attributed to some form of oral infection. We also have reason to believe such conditions as gastritis, dyspepsia, ulcerations of the stomach and intestines, intestinal indigestion, auto-intoxication and constipation are often complicated by oral diseases, particularly when accompanied by a discharge of pus or other infectious material into the oral cavity. Periodontoclasia comes under this class of oral diseases. Food taken into a mouth affected with this disease becomes mixed with the infectious matter before it is swallowed. The constant presence of these organisms in the stomach and intestines disturbs the normal action or function of these parts of the digestive tract and brings about some disorder. In some cases, however, it is possible the virulent effects of the organisms present in this exudate may be decreased to some extent by the oral and gastric secretions, especially if the irritation from the excessive amount of toxins is not prolonged and we have a normal resistance of involved tissues.

But even so we must remember that there is also a direct invasion of infection from these periodontal pockets by way of the blood and lymph channels. Some claim there is far more absorption and general systemic disturbance resulting from periodontoclasia than from the periapical or residual types of infection. Their contention is that in a mouth affected with periodontal disease a large number of periodontal pockets are usually present, whereas in the periapical or residual types, the infection is usually confined to one or a small number of areas. My experience in this work has led me to agree with this thought, excepting, perhaps, in the broad open pocket where we have free drainage. This type of focus, however, is just as serious in its harmful results, by reason of its invasion or involvement of other adjacent tissues. The germs and toxins may be carried directly by the food or the saliva to other parts of the oral cavity, to the tonsils, pharynx, eustachian tube and alimentary canal, causing secondary irritations and absorption, giving rise to secondary foci.

The deep periodontal pocket, where the opening is constricted, preventing free drainage and usually presenting no local symptoms or irri-

*Read before the Orleans Parish Medical Society, July 11, 1932.

tation, pain or even discomfort, is assumed to be the type that does the greatest amount of harm by its invasion of infection through the blood and lymph channels, causing secondary foci in distant organs and parts of the body. This is the type of periodontoclasia sometimes overlooked, because the tooth is usually firm in the socket, there is little or no recession or hypertrophy of the gingivae, no irritation or inflammation of the gum tissue and the patient experiences no pain or discomfort. The ordinary radiographic examination alone might not disclose the pockets because they may be confined to a narrow area on the buccal or lingual surfaces, in which case they would be hidden by the shadow of the tooth root. The radiographic examination and diagnosis alone would only provide us with something definite relative to the extent of bone destruction on the mesial and distal surfaces.

The results of any treatment, for any given condition, of course, depends upon a correct diagnosis. Our clinical examination of the oral cavity should be thorough and complete and every defect and disorder carefully noted and the extent of its involvement definitely determined, if we hope to obtain favorable results. The clinical examination should be supplemented by a full mouth radiographic examination with fourteen films as a minimum. Twenty or more are frequently necessary for a satisfactory full mouth radiographic diagnosis. Our aim in dentistry today is prevention, and our radiographic examination should not only show us infectious areas already developed, but is intended to show conditions which may lead thereto. With this knowledge, before the disorder has actually developed, corrective measures can be instituted and the disorder prevented.

It was with this thought of prevention in mind that the Victor Bolin Junior Lightning Speed Dental Film was manufactured and placed at the disposal of the dental and medical professions for use on small children. With this new dental film, satisfactory radiographs may be made of any child regardless of its age or size and regardless of how nervous or restless it may be. The time of exposure for this new Junior film is only one-fourth of a second.

Many cases of periodontoclasia are really the result of some condition or combination of conditions which developed during early childhood. Malocclusion, for instance, is frequently the sole factor in the development of periodontal pockets. Malocclusion is frequently preventable by proper care of the child's mouth, and it certainly can be corrected before any harm results to the adjacent or investing tissues, if given correct attention early.

I shall repeat this—fourteen films as a minimum, frequently twenty or more, and in some cases this supplemented by extra-oral and occlusal views should be our procedure in a dental radiographic examination. Our angles, both vertical and horizontal, are extremely important. We do not want any superimposition or a lapping over of teeth. We must have a clear view of the interproximal spaces and bone. The vitality test of all teeth, to note the presence of any non-vital teeth, and a trans-illumination of the jaws are both of great value in the final check up when the clinical examination is completed and final diagnosis made.

When we consider that 78 per cent of persons over thirty years of age have suppurative destructions of portions of the maxillary bones, we can appreciate the seriousness of the harm resulting from periodontoclasia, and why it is so important that the physician and dentist be interested in recognizing this condition in its very incipency before any serious systemic involvement. Many patients do not voluntarily present themselves to their dentist for an examination or treatment until the teeth are actually causing pain or discomfort, or until they are suffering with some systemic condition which they suspect to be of dental origin. Usually the patient is seen rather frequently by the physician, however, and he is offered the opportunity of noting any oral condition not entirely normal, or of noting some general systemic disorder which may be aggravated, if not entirely caused by, some dental disease even though no dental defect may be in evidence. He can then refer the patient to the dentist for a complete dental examination and diagnosis.

For a great number of years the physician has been quite concerned about oral foci of infection, but his attention was particularly di-

rected to the peri-apical infection of non-vital teeth, and the removal of any with suspicious areas. Some even insisted upon the removal of every non-vital tooth, regardless of the radiographic findings. At that time no particular stress was placed upon the periodontal pocket. In recent years, however, the leaders in the medical profession have become quite concerned about this type of oral infection, as well as all others, and insist upon a thorough dental examination and the elimination of all infection from the oral cavity.

Periodontoclasia is recognized as an infectious disease, and while many efforts have been made by some of our leading research men, in both the medical and the dental professions, to isolate a specific organism, no success has been met with. It is now generally believed that the bacteria responsible for this infection are common inhabitants of the mouth and are non-specific in character.

For years we all firmly believed calcareous deposits, commonly called tartar, and other accumulations on the surfaces of the teeth and root, were solely responsible for periodontoclasia. In other words, that it was strictly a filth disease and that it could not occur if the teeth were free of all deposits. Accumulations of debris unquestionably favor infection of the gingivae and periodontal membrane by mechanical irritation, and their removal and the maintenance of clean, polished surfaces is absolutely essential. This alone, however, does not suffice to clear up the condition except perhaps in an occasional case. Moreover, we frequently have an infection of the gingivae and underlying tissues unaccompanied by any such deposits.

Some of the other factors which contribute to the lowered resistance of these tissues are: malposed, extruded and partly erupted teeth; empty spaces; tilting teeth; caries; drifted teeth with spaces between; faulty crowns and fillings, the margins of which may project into the soft tissues serving as mechanical irritants; or fillings and crowns lacking in proper contour and failing to form normal contact with adjoining teeth, permitting injury to the gingivae between and around the teeth by impaction and pressure of food during mastication. Fillings; crowns; and bridges, either removable or fixed; may also

be faulty in not restoring normal occlusion with the teeth of opposing jaw, in that there may be over stress, which is termed "traumatic; occlusion" or perhaps a lack of occlusion, in which case the investing and supporting structures suffer from lack of function. Both of these conditions also occur as a result of malocclusion or malposition of the natural teeth. These are the cases, particularly, which can be prevented, in a majority of instances, by early and correct dental attention.

For years the only treatment recommended for a complete elimination of the periodontal pocket was the extraction of the tooth or teeth involved. With our present-day knowledge of this disease and its contributing factors, it has become possible for us to completely eradicate the foci of infection without removal of the teeth involved providing there remains sufficient bony support of the teeth to offer mechanical support and all other conditions are favorable. The harmful results of oral infection are far too serious to permit any doubtful procedures. Whenever there is any suspicion that the oral condition may be the cause of any systemic disturbance, we should be positive of eliminating the infection completely or else resort to extraction of the teeth involved. We cannot offer any set standard to guide the dentist in his selection of the cases curable, without the extraction of the teeth, for, of course, much depends upon the personal skill of the operator and upon the patient's general condition. The mere elimination of the pocket or of other areas of infection will not effect a permanent cure. All sources of infection should be eliminated, the patient should maintain a healthy mouth condition and return to the dentist at certain intervals for prophylactic treatments. All contributing causes should be taken care of and proper attention given to all restorations, fixed or removable, so as to keep them in a hygienic and working condition. Unsanitary mouth conditions, whether it be of the teeth or adjacent tissues or of bridges or plates, are as injurious to the health as infected teeth.

Non-vital teeth with suspicious periapical areas, or teeth having periodontal disease involving two-thirds or more of the root, should be removed. Patients of advanced age, or patients

suffering with such specific diseases as diabetes or syphilis, are unfavorable for treatment and the teeth involved should be removed. Our diagnosis of the condition and selection of treatment should be made only after a careful study of our radiographic and clinical findings and after consulting the physician as to the patient's general condition.

There are three recognized types of treatment employed to eradicate the periodontal pus pocket when retention of the teeth is indicated. The sub-gingival curettage which is known as the conservative type of treatment, the modified flap operation, and the operation known as gingivectomy—both surgical treatments. Each one has its particular value in the eradication of the periodontal pocket if used properly and when indicated. Under no circumstances is any surgical treatment indicated with an acute spirochete fusiform bacillus infection. The acute state should first be relieved. Some merit is claimed for the ultra-violet and other physio-therapy measures in connection with the treatment of periodontal disease and these might prove of some value in time.

The successful treatment of periodontoclasia not only involves the complete eradication of the pus pocket, but includes a correction of all predisposing and contributing factors, and a consideration of the patient's diet. The diet should offer exercise for the teeth and investing tissues and should contain calcium, phosphorus and the necessary vitamins in sufficient quantities and in correct proportions. Such considerations, being influenced by the entire metabolism of the body, should not, it goes without saying, be undertaken if the patient is suffering with some systemic disorder, without the co-operation of the physician. Providing all of these details, beginning with the examination and diagnosis, are carefully carried out, the operative technic is correct and complete and the patient co-operates with proper mouth hygiene, diet and post-operative treatments, the prognosis is favorable. This statement is based upon results obtained in my own practice over a period of 12 years, and from results reported by some nationally recognized leaders in this field.

DISCUSSION

Dr. Val. H. Fuchs: Dr. Shoney has brought to our attention tonight a condition which some of us are very apt to entirely overlook in trying to eradicate an obscure focus of infection. For many years, we have been taught the dangers of abscessed teeth and for awhile everything that looked like a dead or abscessed tooth was immediately removed. The pendulum swung entirely too far and many serviceable teeth were sacrificed, so much so that one medical writer expressed himself as follows: "Removal of teeth cured some things, including the fallacy that it cured everything." Today the dentists are more conservative and the results are just as good.

Dr. Schoeny now presents to us the fact that periodontoclasia is a very potential source of infection. We can readily understand how cases with marked pyorrhea could have all kinds of digestive disturbances from the mere swallowing of food, laden with pus organism, and these cases are fairly easy to diagnose. When we consider that in the examination of superficial pus and exudate from these pockets there are usually found streptococci, pneumococci, diplococci, staphylococci, bacilli, especially the fusiform variety, i. e., spiricheti and amebae, we can readily understand what potential sources of danger these conditions can become.

When we examine pus from the deeper areas, streptococcus viridans and hemolyticus, staphylococcus aureus, and albus and amebae are the predominating organisms.

The cases that will give us the most trouble are those in which the symptoms are so slight as to escape even the notice of the patient. In these cases, the dentist can be of invaluable assistance in clearing up an obscure focus of infection.

We have for a long time made it a rule in our practice to examine the teeth of every patient seen, surprising how many times transillumination will including transillumination of the gums. It is disclose some shadow or darkened area, which, when seen by the dentist, will be diagnosed as an infection. In this way, we believe we have found some foci of infection that would ordinarily have escaped notice.

Dr. Schoeny should be complimented in bringing to our attention a condition which may mean so much to us from the standpoint of betterment of the patient's health.

Dr. Ledoux: It may appear odd for an obstetrician to comment on such a subject as periodontoclasia, but I have always practiced what most of us have preached, and that is, that the medical and dental professions should work together in trying to solve problems that are reciprocates. For the past 10 years I have made it a practice to send each obstetric case, after the first examination, to her

dentist, asking him to give me a report of the condition of the patient's mouth and to make such necessary corrections regarding oral hygiene, extractions, and temporary fillings as he feels are necessary and will insure the safety of the expectant mothers' teeth.

I just chanced to come upon a copy of *Dental Cosmos*, for July, 1932, in which thoughts are reproduced which are in perfect consonance with mine and in keeping with the experience I have had. Gerson made some observations on 100 patients, 50 pregnant and 50 non-pregnant, the pregnancies ranging from two to four months, and the control of 50 being observed at the same time. Six months later, an examination was made of the whole series of cases and these were the results: he found caries incipiens in 89 per cent of the pregnant women, and in 42 per cent of the non-pregnant; caries profundis in 43 per cent of the pregnant women and 16 per cent of the non-pregnant; extractions were necessary in 12 per cent of the pregnant women and 2 per cent of the non-pregnant.

Therefore, our practical co-operation with the dentist should manifest itself, if at any time, particularly during early pregnancy and throughout the prenatal period because then the expectant mother has to pay a considerable price in the condition of her oral cavity in addition to the tax placed on the body, so whatever Dr. Schoeny says should be emphasized during that time.

Commenting on the Bolin films, I have had occasion to see some of these very interesting slides and, while I know little or nothing about them, they look like something very fine to me. It is particularly gratifying that one of our own men, Dr. Schoeny, is the one that suggested and recommended the manufacture of this plate, which has been of great service to the dentists in the study of the oral cavity in children.

Dr. Schoeny (closing): I have nothing further to add except to thank you for this opportunity of appearing before you and of presenting this paper on a subject of such vital importance.

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POSTPONEMENT OF THE ANNUAL MEETING

It is deeply to be regretted that it has been found necessary on account of the present unsettled economic condition throughout the State and the country to postpone indefinitely the Annual Meeting of the State Society, which was to be held this year at Lake Charles. The unfortunate series of circumstances which have arisen in the financial world make this a neces-

sary step. This was decided upon by a written vote of the members of the House of Delegates. The vote was practically unanimous. The delegates felt that the meeting would be so slimly attended and would be confined almost entirely to the physicians living around Lake Charles, and hence it would be unwise to go to the expense of putting on the annual State convention.

The House of Delegates of the State Medical Society has done a wise thing, but nevertheless one can not help but feeling that this unfortunate but necessary postponement will leave void in the year's activities of the profession throughout the State an empty space which will be hard to fill. The Annual Meeting presents a series of excellent scientific presentations which is good for all of us to hear. The social aspect of the meeting is as important; it brings the doctors together; it makes them acquainted with one another; and it encourages the proper fraternal spirit which is often difficult to cultivate and more difficult to achieve. Most of the physicians who are regular attendants at the Society's State meeting derive a great deal from it, and to them, at least, its absence this year will be a real sorrow, mitigated in large part by the fact that it would be a very serious drain on their resources were they to attend the meeting.

We know that the Lake Charles physicians will be disappointed, but we know furthermore, that they will approve of the action taken by President Harrison and the House of Delegates.

THE PERIODIC PAYMENT PLAN FOR THE PURCHASE OF HOSPITAL CARE

The Council on Community Relations and Administrative Practice of the American Hospital Association has published a brochure discussing the general features of periodic payment for group hospitalization. This method of paying for hospital service should receive serious consideration by hospital administrators. The pamphlet itself should be of such interest to hospitals, large and small, that a large number will be required to fulfill the demand.

In a very general way it may be said that the object of the plan of periodic payment is to enable individuals, in normal and ordinary finan-

cial circumstances, to pay in advance for the cost of possible hospital care when sick, subscribing from \$6.00 to \$12.00 a year for such service if needed. By doing this individuals of limited means, who value their independence and who do not wish to become objects of charity when they are deprived of their normal income by illness, are provided with hospital care at a rate which is infinitesimally small as contrasted with the ordinary hospital rates. The plan is a benefit to the hospital, which has some definite idea as to the amount of income it will have for the coming year, and can prepare its budget on these anticipated revenues. The plan is a boon to the physician, for usually the doctor is not paid until after the hospital bill has been met. If the expenses of hospitals are cared for, then the doctor is more likely to receive his fee than when the heavy drain of hospital care has

to be met through current income by the patient. Altogether this scheme of periodic payment in the present day disordered economic state should be of great value to the three parties involved: the patient, the hospital, and the physician.

Several of the larger cities in the United States have already established a periodic prepayment plan, and several New Orleans hospitals have done the same, and several more, it is believed, are planning to put this scheme into effect. It must be understood that it applies only to ordinary illnesses and for a limited period of time. Venereal disease, pulmonary tuberculosis, quarantinable diseases, and mental diseases are usually excluded from the workings of the plan. Obstetrical patients are sometimes excluded and sometimes included, but if the latter, only after a reasonable waiting period.

HOSPITAL STAFF TRANSACTIONS.

TOURO INFIRMARY STAFF MEETING

On Wednesday, March 8, 1933, the regular clinical meeting of the Medical Staff was held with Dr. I. I. Lemann, Chairman, presiding.

Dr. Daniel N. Silverman presented two cases, one an acute bacillary dysentery, and the other a case of mixed acute bacillary dysentery and typhoid fever. These cases were discussed by Drs. Duval and Simon.

Drs. Holbrook and Houston presented a problem case of a patient who had been admitted in coma, and which finally at autopsy had been diagnosed as a case of carbon monoxide poisoning. This had been produced by the patient being in a tightly closed room where a defective gas grate had been burning. The case was discussed by Dr. Wymer of the New Orleans Public Service, Mr. Danecker, City Chemist, and Dr. Lemann.

Dr. Tyrone discussed four cases of uretero-sigmoidostomy, and three cases of vesicovaginal fistula following radiation. This presentation was discussed by Drs. Macheca, Matas, Humphries, and Simon.

The Program Committee then offered two cases which had gone to autopsy. The first was a case admitted with a provisional diagnosis of an acute nephritis with marked ascites. Paracentesis had shown the presence of a bloody fluid which contained embryonal cells. Exploratory laparotomy showed a large abdominal mass which at autopsy proved to be an adeno-carcinoma around the pancreas. This case was discussed by Drs. Silverman, Matas, and Lanford. The second case was one of

a furuncle on the face, with incision resulting in septicemia, multiple pulmonary infarcts and death. This case was discussed by Drs. Rives, Maes, and Matas.

Willard R. Wirth, M. D.

FRENCH HOSPITAL

The regular monthly meeting of the Staff was called to order Friday, March 10, 1933, Dr. H. B. Alsobrook presiding. The minutes of the last meeting were read and approved.

Dr. Alsobrook then introduced Dr. P. H. Jones who spoke on "Observations on a New Drug in the Treatment of Malaria". In 1929 a drug called plasmochin was found and used in the treatment of malaria. It was useful in destroying the crescents and as an aid in the treatment of malaria but it could not entirely supplant quinin. In 1931, however, a new drug, atebirin, was discovered and has proven successful and satisfactory. This drug is especially useful to patients who are highly sensitive to quinin and are therefore unable to take it.

Atebrin is a water soluble, yellow, bitter compound of low toxicity. The average dosage is 22 grains given over a period of 5 days. There is no vomiting, cyanosis, nor any evidence of any untoward effect. The patient runs fever 2 days after beginning the drug. Parasites disappear in the blood stream quicker than with quinin. Usually all have disappeared at the end of the fifth day. However, atebirin does not destroy the crescents. Many therefore advise its use with plasmochin.

Dr. Jones reported his results of the use of ateb-

rin on 40 cases of malaria. Of the 40 this drug relieved the acute symptoms and produced no ill effects in all but three cases. These three consisted of (1) a boy who suffered with excessive vomiting, (2) a 7½ months pregnant woman who was relieved of malaria symptoms but later delivered a macerated fetus, and (3) a negro of 70 years who died at the end of 4½ days with uremia.

Dr. Jones' talk was discussed by Drs. W. H. Harris and M. J. Lyons.

Dr. D. V. Longo presented a paper on "Idiopathic Primary Hepatic Abscess". The etiology of primary hepatic abscess is usually obscure. The most important cause is appendiceal suppuration, as nearly 50 per cent of all pyogenic abscesses are said to originate in this focus. However, ruptured duodenal ulcer, thrombosed hemorrhoidal veins, suppurative cholangitis, colitis, typhoid fever, and intestinal obstruction have been causative in some cases.

Pain is inconstant. Jaundice may be present early. Edema of the chest wall from the sixth to the eighth interspace is considered by many to be pathognomonic of hepatic abscess, but is usually a late sign. Enlargement of the spleen is common but also is a late sign.

Anemia is of the secondary type and progressive. There may be a leukocytosis. Fluoroscopic examination usually reveals elevation of the diaphragm.

Pyogenic abscess of the liver may be single or multiple but according to Moynihan 70 per cent are single and affect the right lobe.

Dr. Longo reported a very interesting case of hepatic abscess. The chief signs were chills, fever and pain in both costal margins with bulging in the upper right quadrant. Roentgenogram showed the right diaphragm to be markedly elevated and immobile. Laboratory findings were negative. It was decided to operate. The abdomen was entered and a large liver abscess found. Suction was introduced and four collapsible rubber tubes were inserted. Culture of the material made but found to be negative. No cause for the abscess could be determined. Recovery was uneventful.

This paper was discussed by Drs. L. J. Menville, W. H. Harris, P. H. Jones and F. L. Loria.

The reports of discharges and deaths were then read by the secretary. A case of carcinoma of the tongue was opened to general discussion. It was agreed that this patient probably died from acute dilatation of the heart instead of asphyxia since although he had difficulty in breathing he was able to be up and talking just immediately before he expired.

N. J. Tessitore, M. D.

CHARITY HOSPITAL STAFF MEETING

Dr. Love presided at the regular monthly meet-

ing of Charity Hospital Medical Section held March 21.

Dr. Cazenavette showed three cases of spinal cord sclerosis of various types. Two cases were of combined sclerosis due to pernicious anemia, and the other a case of amyotrophic lateral sclerosis. The fourth case shown was a case of multiple neuritis of unknown etiology. These cases were discussed by Drs. Freiman, Hopkins, and Shushan.

The second presentation was by Dr. Kampmeyer, who first showed and discussed a case of lung abscess greatly benefitted by postural drainage. The second case discussed was one of pulmonary spirochetosis. Five cases which had gone on to autopsy were discussed by Dr. Connell. The first was a case of myosarcoma, probably primary in the kidney. Another was a case of leukemia, probably of the acute lymphatic type. The three other cases were massive right pleural effusion, cerebellar tumor, and carcinoma of the head of the pancreas. Drs. Robins and Bradley discussed these cases.

Willard R. Wirth, M. D.

HOTEL DIEU AND GYNECOLOGICAL SOCIETY

The joint meeting of Hotel Dieu Staff and the Gynecological Society of New Orleans was held Monday, February 20, 1933, at Hotel Dieu. In the absence of the President, Dr. P. L. Thibaut, the Vice-President, Dr. P. B. Salatich presided over the meeting, with the Secretary, Dr. Ruth Aleman, at the desk.

Dr. Lucien A. LeDoux presented a paper, "Post partal Pyelocystitis" with report of two cases. His conclusions follow:—

- 1: Pyelocystitis is an infrequent complication of the postpartal period. When it occurs it presents a serious medical and economic picture.
- 2: Intestinal stasis and pressure on the ureters by the presenting part, usually the vertex, are predisposing causes; the colon bacillus is the causative factor and I believe is transmitted through the pelvic lymphatics from the sigmoid and rectum to the bladder.
- 3: Early and complete study of the urological tract should be made, as positive urinary findings exist from 24 to 48 hours before symptoms appear, and a bilateral hydronephrosis is usually a part of the picture.
- 4: Treatment must be aggressive and thorough. Besides the usual medication per oram, bladder instillations and irrigations, ureteral catheterization, drainage and lavage, blood transfusion, and B. coli immunogen will all have to be used.
- 5: Diet and other measures designed to change the intestinal flora are essentials in the treatment, and progress will be made only when the intestinal culture for a B. coli becomes negative.
- 6: A tendency to constipation during treatment will cause a return of symptoms and findings

and this must be guarded against. 7: Such cases must be treated urologically and dietetically for weeks and sometimes months after they are clinically well.

Dr. Dan Silverman: The use of acidophilus bacillus is specific for the treatment of conditions which have to do with the activity of the colon bacillus, whether accompanied by diarrhea or by constipation. The question is raised as to whether the acidophilus organisms outgrow the colon bacilli, or whether it is a reaction in the colon distinctly acid which destroys or inhibits further growth of the colon bacilli. Some authorities favor the latter view. Just why these organisms migrate outside the intestinal tract and become pathogenic, causing pyelitis, is difficult to say.

Dr. F. J. Chalaron agreed with Dr. LeDoux in that the intestinal focus should be cleared before the urologist can do any good; he also agreed in the fact that the infection is not blood-born, but is carried by the lymphatics.

Dr. A. Mattes: In studying a series of cases we learned that the dry type of case with intestinal disturbance does not respond to lavage; the problem is not of pyelitis, but of pyelonephritis. In these cases, if we cannot get the patient to take liquids by mouth or in some other manner, the results are bad.

Dr. Maurice Gelpi presented a paper on "Papillary Cystadenoma of the Ovary, Pneumoperitoneum". Its object was to illustrate the value of pneumoperitoneum at the time of paracentesis for unaccountable ascites, thereby establishing a diagnosis without resorting to laparotomy. The use of this method is limited to a certain type of case; two such cases were reported:

The first was referred after a tapping elsewhere because of dyspnea. Paracentesis was done, followed by pneumoperitoneum, and X-ray showed widely disseminated metastatic nodules evidently the result of a ruptured papillary cystadenoma. Patient died within six weeks from hypostatic pneumonia and secondary anemia. Without the information derived from pneumoperitoneum, one might have been tempted to do a laparotomy, which would have been productive of nothing but additional suffering and expense.

The second case had a dilatation and curettement and radium for non-malignant papilloma of cervix with erosion and hyperplasia, causing leucorrhea and metrorrhagia. She was relieved but later developed ascites. Using trocar and canula, a catheter was inserted and 5500 c.c. fluid aspirated and 2000 c.c. of air replaced. X-ray then showed metastatic nodules evidently the result of a ruptured papillary cystadenoma. Here again X-ray and the coincident tapping and pneumoperitoneum established a diagnosis and demonstrated the futility of laparotomy.

Dr. Lucien Fortier demonstrated the X-ray findings in these two cases.

Dr. H. B. Alsobrook: exhibited a specimen consisting of both ovaries and the uterus. The patient, 23 years of age, had had three paracenteses when he first saw her. Laparotomy was done and the above mentioned tissues removed. While in the hospital, she received six applications of X-ray therapy. Within 14 months she has gained 40 pounds, and has been well ever since.

Dr. Louis Levy: In these two extreme cases, tapping was justified. However, we know that if in tapping these tumors any fluid escapes into the cavity, there is a possibility of spreading infection.

Dr. Gelpi concluded with the following remarks: In a case of papillary cystadenoma, the length of life of the patient is from six months to two years, —seldom farther in my experience. However, Dr. Hurdon reported a case with disseminated nodulations throughout the abdomen which required repeated tapping, but lived eight years.

Provided conditions are favorable, undoubtedly the ideal treatment is the complete extirpation of the ovary affected. In general, there is no question about the danger of tapping ovarian cysts; yet in these two cases, which were encountered in an inoperable stage, one was compelled to do something, especially in view of the dyspnea.

Dr. P. B. Salatich reported a case of "Chorio-Epithelioma". Patient gave a history of having had an operation for ectopic gestation thirteen years ago; the surgeon advised her to return for another operation later, but she failed to do so, since she had no further disturbance. Seven weeks prior to admission she had a fall, followed by intense pain in the lower abdomen, with frequent burning micturition. Pelvic examination revealed a fixed mass extending to the umbilicus and slightly to the left. Laboratory findings were: Total white count 13,800; polys. 78; red cells 3,785,000; hemoglobin 65 per cent; Wasserman, negative; P. S. P. 40 per cent; Urine trace of albumin and 1 plus pus.

A ruptured sac, about the size of a cocoanut, still containing approximately 6 oz. of fluid, and firmly adherent to the omentum, was removed, and a drain left in. (The sac was found to contain a placenta.) A right hydro-salpinx was removed; also the appendix; the uterus was suspendid. She left the hospital in 13 days, and has not since returned with any complaint.

Dr. Maurice Couret discussed the case and showed lantern slides of the tumor.

Dr. E. L. King: The treatment of the adherent placenta in full time or nearly full time abdominal pregnancy with a living child is a definite problem. If the placenta is attached to such an organ as the uterus or broad ligament, we can safely remove it along with the structures to which it is attached. But if it is attached to other structures—the mesen-

tery or intestine—it is almost impossible to remove it without encountering uncontrollable hemorrhage. It has become the custom to leave these placentas in the abdomen, cutting the cord close, and resecting as much of the membrane as possible, leaving the placenta in situ with the understanding that it will be absorbed. This process of absorption was first demonstrated on a lower animal.

Dr. Peter Graffagnino: Chorio-epitheliomas or chorio-carcinomas following tubal pregnancy are so extremely rare that I do believe that when the placenta can be removed it should be, but where its removal, because of its attachment, would jeopardize the life of the patient, it should be left in and the abdomen closed without drainage. The experiments of Dr. Beck of Chicago demonstrated that it was possible to leave the placenta in the peritoneal cavity of animals, and that this placenta would be absorbed or completely taken care of by the peritoneum as proven by operations performed at a later period on the same dogs. Since 1922 I have followed this procedure in four cases of full term abdominal pregnancies and every case made an uneventful recovery.

Dr. H. Vernon Sims: Reported a case of chorio-carcinoma which followed two weeks after removal of hydatidiform mole. Uterine bleeding persisted, laparotomy was performed, and cystic ovaries (greatly enlarged), the uterus, and a cuff of vagina were removed. She recovered and is well to date.

These tumors follow (in the order of frequency): First, hydatidiform moles; Second, abortions; Third, normal pregnancies; and Fourth, extrauterine pregnancies. The most fascinating point is that these tumors are just the ordinary chorionic villi run wild. When the chorionic villi undergo changes and become malignant, the growth is really carcinoma, because they are from the ectodermal layer. The characteristic symptom of chorio-epithelioma of the uterus is bleeding, particularly after removal of a hydatidiform mole. In view of the fact that they follow these moles so frequently, it would be well to consider the insertion of radium after removing a mole.

The treatment, when positive diagnosis of chorio-carcinoma is made, is complete extirpation of both tubes, ovaries, the whole uterus, and a cuff of the vagina.

KING'S DAUGHTERS' HOSPITAL STAFF MEETING

The regular monthly meeting of the King's Daughters' Hospital, Greenville, Miss., was held Wednesday evening, March 1, following the usual staff dinner at the hospital. The newly elected president, Dr. C. P. Thompson, presided.

Dr. Scree presented additional amendments to the by-laws, bringing them into closer agreement with the recommendations of the American College

of Surgeons, and at the same time embodying certain recommendations of the Hospital Board.

Dr. Archer announced plans and preparations for the entertainment of the Delta Medical Society, during its next meeting in Greenville, in April.

Dr. J. F. Lucas presented a discussion of rupture of the uterus following a previous caesarian section, giving in abstract the histories of two patients.

The first case was that of a 29-year-old woman. The last of three children was born at 7½ months by caesarian section, indications for which were not known, followed by wound drainage which lasted three months, and low ventral hernia.

The present pregnancy was of 8½ months; L. O. A. position, not engaged; the patient's condition excellent. She had not been conscious of labor pains but was awakened at 2:30 A. M. by sharp tearing pain in the lower abdomen; followed by typical signs of shock. There was no vaginal bleeding. At immediate laparotomy a four-inch tear in the uterus was repaired after removal of a dead fetus, and large quantities of blood. Appropriate treatment for shock and hemorrhage revived the patient, but complete anuria ensued, lasting until the patient's death on the second day, despite decapsulation of the kidneys.

The second patient, aged 22 years, whose second child, aged 3 years, was born by section, because of eclampsia, was again pregnant 8 months. Light cramps were experienced for seven days, and severe pain continuously for two days before admission to the hospital in a state of shock. At operation the uterine tear, in the line of the old scar, was plugged by placenta. The abdominal cavity was cleansed of blood clots, a stillborn fetus delivered, and the uterus removed. Treatment for shock was continued during and after operation. Her convalescence was complicated by acute dilation of the stomach.

Dr. Lucas emphasized the need for more conservative application of the indications for caesarian section on account of both immediate and remote mortality and morbidity. He favors the low caesarian section because the primary mortality is less, and the liability to spontaneous rupture during later pregnancy, before the onset of labor, is very much less than for the classical caesarian.

Dr. Lewis, in discussion, reported a case of rupture after thirty minutes' labor, not following a previous section, which occurred in his presence, and proved fatal.

Dr. H. A. Gamble called attention to the increasing success of modern non-surgical treatment of the toxemia of pregnancy, which removed many cases from the field of indications for primary section.

Dr. D. C. Montgomery discussed spontaneous epistaxis, illustrating his remarks by the case his-

tory of a young man, aged 29 years, who had repeated severe hemorrhages arising from the left ethmoidal region, but without demonstrable local pathology, blood dyscrasia or inherited tendency. Dr. Montgomery has seen but very few such cases of epistaxis without assignable cause, and finds no adequate discussion of this group in a search of the literature. He hopes to elaborate and publish his observations at some later date.

Dr. A. R. Perry presented the monthly board of health report for Washington County.

J. A. Beals,
Secretary.

MISSISSIPPI BAPTIST HOSPITAL STAFF MEETING, JACKSON, MISS.

The staff met in the dining room of the hospital at 6:30 P. M., March 7. A wonderful dinner was served by the hospital. There were 35 members present and four visitors.

Dr. Mitchell of the State Insane Hospital made a short talk that was appreciated by all. Dr. Willis Walley, the superintendent of the Charity Hospital, was present and made a talk concerning that institution and it was to the point of discussing the present action and needs of the institution. Drs. Noel Womack and Jack Barksdale of the Jackson Infirmary staff made talks which were very timely and enjoyed by the staff.

The regular program was entered into and a short talk made by the superintendent, Mr. Alliston, on good fellowship and the present situation.

Drs. V. D. Hagaman and F. Hagaman reported a case of sinusitis, frontal, with osteomyelitis of the frontal bone. This case was of a child who had a pansinusitis. Operation was done by Dr. Harris, who was not present at the meeting, but who was assisted by Dr. Hagaman who presented the case. This consisted of an open operation on the frontal sinus with drainage as well as drainage of the ethmoids and sphenoids with drainage of the antra. In a short while considerable drainage through the scar as well as some fluctuation over the frontal area was noted and the case was referred to Dr. Frank Hagaman for operation. This consisted of sequestrectomy with the Orr treatment of the diseased bone. Some discussion was entered into as to the etiology of this type of osteomyelitis and the point was well established that this type differs in origin from the usual disease of the long bones in that this was not blood borne but by direct extension from the associated disease of the sinus. The patient was stated to be doing nicely with granulation of the area and no trouble otherwise at the present time.

Dr. J. P. Wall presented two cases as follows:

Case 1.—Negro male, thirteen years of age, who

had been denied admission to two hospitals, was seen with a stab wound of the left lower quadrant with protrusion of the small intestine, which was also twisted upon itself, from the wound. A stab wound of the forearm was also present. He was made ready for an emergency operation and blood matched and the abdomen opened and it was found that there was a perforation of the small intestine and a large round worm worked its way out of the peritoneal cavity as the incision was enlarged. The intestine was very red with many petechial spots over the same and much distention of the gut. Incision was made into the intestine to allow the escape of the gas so that same could be reduced to the abdominal cavity. When this was done nine more long worms, were removed from this portion of the intestine, some eight inches in length. The abdomen was closed in the usual manner but no drainage was put in and with glucose drips night and morning and nothing by mouth other than the fact that the patient chewed a hole in the ice cap one night and drank all the water from same. At the present time he has had a normal bowel movement. This is his fourth day and seems to be doing well.

Case 2. A white male patient upon whom a gastro-enterostomy had been done for a gastric ulcer had been fed as usual by glucose drips and nothing by mouth. On his fifth post-operative day he suddenly developed a slow pulse of 38. There seemed no evidence of heart block or any cardiac disturbance and since Osler refers to the fact that diabetic patients, with high blood sugar, as having a relatively slow pulse it was thought that the amount of glucose given intravenously might have caused this and twenty units of insulin were given and the pulse rose in a few hours to 66. No blood sugar was done before the administration of the insulin.

Dr. H. C. Sheffield then presented a short talk on the present banking and financial situation which was very complete and enlightening to us all. He closed his remarks with a brief talk on the good fellowship of the physicians here.

Mr. Palmerlee made an announcement that an insulin film would be shown here about March 20, which will be of interest to all.

A motion was made by Dr. Wall that the staff meeting be changed to the third Tuesday in the month due to the fact that the Central Medical Society has changed its time of meeting to the first Tuesday night. This motion was carried unanimously.

A motion was made by Dr. Wall that the president extend to Dr. H. R. Shands who is now at the State Tuberculosis Sanatorium at Magee all good wishes and greeting from the Staff.

Lawrence Long,
Secretary.

NORTHEAST MISSISSIPPI HOSPITAL STAFF MEETING

The staff of the Northeast Mississippi Hospital Booneville, was called together in special meeting February 21, at 7:30 P. M., by the vice-president, Dr. W. V. Davis.

The meeting was called for the purpose of working out a plan to conserve the charity fund during the year 1933, in order to care for as many patients as possible and to regulate fees so as to conform as nearly as possible to the averages set by the hospitals of the state and to meet with the approval of the State Hospital Association.

After the various discussions the following motion was adopted: That three staff members be selected as a rotation charity staff, each man to serve one month and during this month be responsible for all charity patients and their care; that the remainder of the staff act as consultants to be called in at the discretion of the active member; that no charity cases be accepted except emergencies.

This plan is to be submitted to the Board of Directors for their approval and selection of the charity staff at the next regular meeting.

R. B. Cunningham.

VICKSBURG SANITARIUM STAFF MEETING

The regular monthly meeting of the Vicksburg Sanitarium was held on March 10 with 21 physicians in attendance. After the business of the staff and reports from the Records Department and Analysis of the Work of the Hospital, Dr. F. Michael Smith, Director of the Warren County Health Department, gave a report of vital statistics for the month of February.

Sepical Case Reports were presented as follows:

1. Gunshot Wound of the Knee Joint.—Dr. J. A. K. Birchett, Jr.

Discussed by Dr. G. M. Street.

2. Oculo-Glandular Type of Tularemia, Presenting the Symptom Complex of Parinaud's Conjunctivitis.—Dr. Edley H. Jones.

Discussed by Drs. C. C. Thompson and F. M. Smith.

3. Tularemia.—Dr. R. A. Street, Jr.

Discussed by Dr. L. S. Lippincott.

Three-minute Reports of the Literature of the Month were made as follows:

1. Dr. G. M. Street.—Retained Placenta Difficult of Removal.

2. Dr. A. Street.—Wounds and Diverticula of the Esophagus; Prevention of Infections.

3. Dr. L. S. Lippincott.—Prostatic Hypertrophy; Laboratory Diagnosis of Tuberculous Meningitis.

4. Dr. J. A. K. Birchett, Jr.—Hexylresorcinol In Bartholin Abscess; Ovarian Teratomatous Cysts in Children; Richter's Hernia.

Dr. L. J. Clark.—Sympathectomy in Disfunctions

of Blood Vessels, Smooth Muscle and Glands; Etiology of Hepatic Cirrhosis; Complications of Hyperthyroidism.

The next meeting of the staff will be held Monday, April 10 at 6:30 P. M.

Leon S. Lippincott,
Secretary.

Abstract—Tularemia.—Dr. R. A. Street, Jr.

Patient.—Colored female, aged 40 years, farm worker, first seen February 21, 1933. Present complaint.—Painful, swollen areas in right epitrochlear region and in right axilla. History of present complaint.—About one month ago first noted a painful "pimple" on the medial side of right index finger near base. This area soon became larger and began to discharge; very painful. One week later swelling noted in right epitrochlear region, becoming painful and increasing in size. Several days later similar swelling appeared in right axilla. Since onset, no appetite and generally weak and "feverish". No chills; no urinary symptoms. Bowels sluggish. During the past week there has been redness of both conjunctivae and a feeling of foreign bodies in both eyes; also there have been reddened tender areas over surface of palm and tips of fingers of right hand. No history of handling rabbits or other animals since beginning of illness; several rabbits cleaned about three weeks before onset. No remarkable loss of weight. Past history.—Negative. Physical examination.—Emaciated colored female, with moribund appearance, temperature 100.4°F.; pulse 72. Marked kyphosis and lordosis of spine. Conjunctivae reddened, most marked with some induration near outer canthi. Tongue coated; teeth dirty, especially at gum margins. Right hand has several large ecchymotic, indurated, tender areas over the hypothenar and thenar eminences and on tips of the fingers. On medial side of index finger near base, is scab on a small central core and with a scaly area surrounding. A tender, fluctuating area over the right epitrochlear gland; a firm, enlarged node palpable in this area, about the size of a large marble. In right axilla, another large, tender node, also fluctuant but less markedly. A soft, tender mass in upper part of dorsal surface of arm, not fluctuant. Agglutination test for tularemia showed complete agglutination in titre of 1:810. Treatment.—Fluctuant areas incised and drained, with moderate purulent discharge from epitrochlear region. Wounds packed with iodoform gauze. Mercurochrome given intravenously. Subsequent.—On March 7, incised areas had healed and there was no present complaint. Nodes were still enlarged. Patient stated that she had felt much better at first after treatments and had regained her appetite. A few days ago again began to feel "feverish" and weak and noted ecchymotic, tender, indurated areas in the palm of the left hand, similar to those before pres-

ent on the right hand. Eyes had improved. Physical examination showed essentially the same findings as before except the fluctuation and tenderness had disappeared in the right arm areas and the ecchymotic areas had disappeared. There were several ecchymotic areas on the palm of the left hand and these were tender. No enlargement of epitrochlear or axillary glands on left side. Temperature normal. Mercurochrome was again administered intravenously.

Abstract.—Lympho-Sarcoma of Left Tonsil.—Dr. L. J. Clark.

Patient.—White, male, age 41; entered clinic September 27, 1932. Present complaint.—Sore throat with painful and difficult deglutition; loss of weight, about 30 pounds. History of present complaint.—Has been suffering for several months. Illness began as a tonsillitis with later abscess which ruptured spontaneously, discharging for some time and continuing sore. Later ulcerations on left tonsil, treated for several weeks without relief. Ulceration similar to that of Vincent's angina with sloughing, but several forms of treatment brought no relief. Physical examination.—Extensive ulceration involving entire left tonsil, with marked induration of roof of mouth and enlargement of left cervical lymph nodes and all adjoining structures. Gumma, tuberculosis and malignancy were considered. Biopsy revealed lympho-sarcoma. Roentgen ray examination of chest and further physical examination showed no evidence of metastasis. Treatment.—In considering a plan of treatment, in spite of the hopeless prognosis, deep roentgen ray therapy seemed to be the only available form. Patient was given at weekly intervals one hour, 200

hiliivolts, 4 milliamperes; focal spot distance 50 cm.; filter 0.5 millimeter copper, 1 millimeter aluminum, at first centered over left angle of jaw for three doses. This produced very gratifying results, especially in relief of pain and decrease in swelling of nodes of neck and marked decrease in size of ulceration. After improvement for two or three weeks, pain, swelling, and ulcerations recurred. Treatment with 50 milligrams of radium for thirty minutes within the mouth, directed towards the ulcerated area, was then given, but was not repeated because of some rather objectionable features and apparent aggravation of symptoms. Patient later became weak, could not eat on account of pain and became confined to bed. Feeding by tube was necessary and was followed by improvement in the general condition. Daily deep roentgen-ray therapy was again started, using the Coutard method, 200 killivolts, 4 milliamperes; focal spot distance 50 cm.; filter, copper 1.77mm., aluminum 1. mm.; time 20 minutes each; different exposures. A total of 7.3 hours were given to beginning skin erythema and a suggestive treatment membrane of mucosa of mouth. There was some improvement but not enough to withdraw the tubal feeding. However, we felt that there was enough roentgen-ray for the time. About 10 days after stopping treatment, lethargy developed and later coma. Patient was admitted to hospital and given palliative treatment and partially regained consciousness at times. Later went into a deep coma and died, five days after entering hospital. There were symptoms of meningeal irritation before death. No autopsy was granted. The cause of death was apparently meningitis or an extension of the malignant process to the brain tissues.

TRANSACTIONS OF ORLEANS PARISH MEDICAL SOCIETY

CALENDAR

April 3—Eye, Ear, Nose and Throat Hospital Staff, 8 P. M.

April 5—Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

April 7—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

April 7—Physiology Seminar, Tulane Medical School, 5 P. M.

April 10—ORLEANS PARISH MEDICAL SOCIETY, Joint Scientific and First Quarterly Executive Meeting, 8 P. M.

April 12—Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

April 12—Touro Infirmary Staff, 8 P. M.

April 14—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

April 14—Physiology Seminar, Tulane Medical School, 5 P. M.

April 14—French Hospital Staff, 8 P. M.

April 17—Hotel Dieu Staff, 8 P. M.

April 18—Charity Hospital Medical Staff, 8 P. M.

April 19—Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

April 19—Charity Hospital Surgical Staff, 8 P. M.

April 20—Eye, Ear, Nose and Throat Club, 8 P. M.

April 21—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

April 21—I. C. R. R. Hospital Staff, 12 Noon.

April 21—Physiology Seminar, Tulane Medical School, 5 P. M.

April 21—Mercy Hospital Staff, 8 P. M.

April 24—ORLEANS PARISH MEDICAL SOCIETY, 8 P. M.

April 25—Baptist Hospital Staff, 8 P. M.

April 26—Clinico-Pathological Conference, Touro Infirmary, 10:30 A. M. to 11:30 A. M.

April 28—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

April 28—Physiology Seminar, Tulane Medical School, 5 P. M.

During the month of March besides the regular meeting of the Board of Directors the Society held one special meeting, one joint meeting with the New Orleans Gynecological and Obstetrical Society and one joint Clinical Meeting with the Charity Hospital Staff.

At the special meeting held March 3, 1933, a new Sound Film on the production and clinical application of Iletin (Insulin, Lilly) was shown.

At the joint meeting of the Society with the New Orleans Gynecological and Obstetrical Society, the following program was presented:

Infant Mortality in New Orleans; a Preliminary Report of Some Aspects of a Survey made by the United States Children's Bureau, by Dr. Martha Eliot, Director, Child Hygiene Division.

New Orleans' Maternal Mortality. (Lantern Slides), by Dr. J. R. McCord, Professor of Obstetrics, Emory University.

The following resolutions introduced at the meeting of February 13, were adopted:

In view of the thirty-three and one-third per cent reduction in dues of the Orleans Parish Medical Society for the year 1933, and on recommendation of the Treasurer's Report Committee, and with the approval of your Board of Directors, a resolution is herewith offered that the entire income from the Domicile Fund be allocated to Library maintenance.

It was moved by Dr. Signorelli, that the Delegates of the Orleans Parish Medical Society to the Louisiana State Medical Convention in Lake Charles, be requested to work for reduction of dues of the State Society, but to such an amount as would in no way inconvenience the operation of the State Society.

A caucus of the Orleans Parish Medical Society Delegates to the Louisiana State Medical Society Convention was held before the special meeting of the Society, March 3.

At the Clinical Meeting held March 27, interesting cases were presented by the members.

Drs. Isidore Cohn, A. E. Fossier and Lucien Ledoux read papers before the Third District Medical Society meeting held in New Iberia.

Dr. O. W. Betha made a talk before the Pike County Medical Society, McComb, Mississippi, and conducted a clinic.

Drs. Edgar Burns, J. H. Musser and Robert A. Strong, were on the program of the Tri-State Medi-

cal Society meeting which was held at Marshall, Texas, Wednesday and Thursday, March 15 and 16.

Dr. Martha Eliot, Director of Child Hygiene Division of the United States Childrens' Bureau, was in the City for several days and gave a number of interesting talks during her stay.

Dr. Elizabeth Bass was appointed as a representative of the Medical Women's National Association to attend the Fourth Congress of the Pan-American Medical Association at Dallas.

Mr. Michael Davis, Director of Medical Service of the Julius Rosenwald Fund, addressed the Staff of Touro Infirmary following a banquet which was tendered him by the Board, Monday, March 20.

The following doctors from New Orleans, were on the program of the Fourth Congress of the Pan-American Medical Association at Dallas:

Drs. Chas. F. Craig, R. D'Aunoy, L. R. DeBuys, Edward L. King, Leon J. Menville, T. B. Sellers, J. N. Roussel, Sidney K. Simon, Robert A. Strong, M. T. Van Studdiford and H. W. E. Walther.

It was with regret that we learned of the death of Dr. Walter Sistrunk, of Dallas, Texas. Dr. Sistrunk formerly lived in New Orleans, and two years ago delivered the Stanford E. Chaille Memorial Oration.

MERCY HOSPITAL ELECTIONS

Dr. Frank J. Chalaron was elected Chairman of the Mercy Hospital for the year 1933; Dr. Philip C. DeVerges, Vice-Chairman; Dr. Edwin L. Zander, Treasurer; Dr. Theo. F. Kirn, Secretary.

The following committees were appointed by the Chairman to serve for the year 1933 for the Mercy Hospital: Death and Record Committee: Dr. George Hauser, Chairman; Dr. M. J. Duffy, Dr. Sims Chapman. Clinic Committee: Dr. Philip C. DeVerges, Chairman; Dr. Theo. F. Kirn, Dr. J. A. Colclough. Committee for Selection of Internes and Clinical Clerks: Dr. Chaille Jamison, Chairman; Dr. Philip J. Carter, Dr. John F. Dicks. Scientific Committee: Dr. James Dabóval, Chairman; Dr. Maurice Lescale, Dr. R. A. Oriol. Library Committee: Dr. Joseph Scott, Sr., Chairman; Dr. Tracy Gately, Dr. R. J. Maihles. House Committee of Internes and Nurses: Dr. Joseph E. Brierre, Sr., Chairman; Dr. Theo. F. Kirn, Dr. E. L. Zander. Committee to Amend the By-Laws: Dr. E. L. Leckert, Chairman; Dr. J. J. Irwin, Dr. E. A. Ficklen, Dr. W. P. Gardiner, Dr. Theo. F. Kirn.

TREASURER'S REPORT

ACTUAL BOOK BALANCE: 1/31/33	\$1,307.92
February receipts	1,994.05
	\$3,301.97
February expenditures	\$ 981.22
ACTUAL BOOK BALANCE: 2/27/33	\$2,320.75

LIBRARIAN'S REPORT

One hundred and eight volumes have been added to the Library during February. Of these, 56 were received by gift, 39 by binding, and 13 from the New Orleans Medical and Surgical Journal. A notation of new titles of recent date is given below

In addition to everyday calls for particular titles and for material which was furnished at once, references have been prepared on the following subjects:

Calcium salts in diet.
Protein contents in glycemia.
Progressive muscular atrophy.
Neurological effect of toxic poisoning.
Tuberculosis of the breast.
Electrocoagulation of tonsils.
Angina pectoris and coronary thrombosis.
Teratoma of ovary.
Sodium ricinoleate.
Work of 44 different men in the field of non-specific therapy.
Auricular fibrillation.
Prognosis in fracture of spine.
Undulant fever.
Origin of symbolism of Caduceus.
Madame Curie.
Insects and disease.
Sympathectomy.
Carbon poisoning.
Simple material on radium.
Dilaudid.
Peptone.

Immunity in typhoid.
Proteose.
Echinococcus of liver.
Histamine.

NEW BOOKS

Western Reserve University—Dept. of Physiology—Collected papers. 1923-27.
Association of American Physicians—Transactions. 1922-29, 1931-32.
American Hospital Association—Transactions. 1932.
St. Thomas Hospital Reports. 1927-28.
Christopher, Frederick—Minor Surgery. 1932.
McPheeters, H. H.—Varicose Veins. 1931.
General Medicine. 1932. (Practical Medicine Series).
Homans, John—Textbook of Surgery. 1932.
Phelps, W. M.—Diagnosis and Treatment of Postural Defects. 1932.
Clifford, Randall—Sputum. 1932.
Crossen, H. S.—Synopsis of Gynecology. 1932.
Swanberg, Harold—Radiologic Maxims. 1932.
Piney, A.—Diseases of the Blood. 1932.
Beekman, Fenwick—Office Surgery. 1932.
Rankin, F. W.—Colon, Rectum and Anus. 1932.
Strong, R. P.—Typhus Fever. 1920.
Rockefeller Foundation—Methods and Problems of Education. v. 21. 1932.
Sicard, J. A.—Use of Lipiodol. 1932.

Frederick L. Fenno, M. D.,
Secretary.

LOUISIANA STATE MEDICAL SOCIETY NEWS

IMPORTANT ANNOUNCEMENT
ANNUAL MEETING

I wish to take this opportunity to advise the members of the Louisiana State Medical Society, that the Annual Meeting of the Society, which was to be held in Lake Charles, April 25, 26, and 27, 1933, has been cancelled. This was due to the unprecedented financial crisis which our State and Nation is now experiencing. On the recommendation of the Lake Charles physicians, and approved by the House of Delegates of the State Society, the Executive Committee was called to meet on March 23, at which time plans were developed for the business meeting. Their decision was to hold a business meeting in New Orleans of the House of Delegates on Monday, April 24, and the following morning, Tuesday, April 25. Appropriate programs will be disseminated very shortly throughout the entire profession of the State. This re-arrangement was very regrettable, especially to the physicians of Lake Charles and to the executive officers of the State Society, who were co-operat-

ing whole-heartedly in developing the plans for the approaching meeting. They, however, feel that the re-arrangement was absolutely necessary and taken in the interest of the organization whom they are trying to serve.

P. T. Talbot, M. D.,
Secretary-Treasurer.

SECOND DISTRICT MEDICAL SOCIETY

The Second District Medical Society held its regular monthly meeting in Hahnville, at the home of Dr. L. T. Donaldson. The scientific program consisted of a very instructive paper on "Electrocoagulation of Tonsils", by Dr. C. L. Brown of New Orleans. There was a full discussion by the members present. Following the meeting a very delightful dinner was given by the host, Dr. Donaldson. Other than Dr. Brown, the guests from Orleans Parish were: Dr. Daniel N. Silverman, Councilor of the Second Congressional District; Dr. Leon J. Menville, and Dr. Emmett Irwin.

The next monthly meeting of the Society will be held at the home of Dr. W. F. Guillotte, in LaPlace.

THE MADISON, EAST CARROLL AND WEST CARROLL TRI-PARISH MEDICAL SOCIETY

The regular monthly meeting of the Tri-Parish Medical Society was held in Tallulah, Louisiana, March 7, 1933, with the following members present:

Dr. G. W. Gaines, Tallulah.
 Dr. E. O. Edgerton, Tallulah.
 Dr. B. T. Ferguson, Waverly.
 Dr. L. Stevens, Tallulah.
 Dr. A. T. Palmer, Tallulah.
 Dr. H. C. Sevier, Tallulah.
 Dr. W. K. Evans, Lake Providence.
 Dr. B. R. Burgoyne, Lake Providence.
 Dr. G. S. Hopkins, Lake Providence.
 Dr. J. Preston Davis, Lake Providence.
 Dr. B. C. Abernathy, Sondheim.
 Dr. G. Douglas Williams, Lake Providence.
 Dr. L. A. Masterson, Oak Grove.
 Dr. E. D. Butler, Oak Grove.

We are sorry to report that our President, Dr. William H. Hamley, and our Second Vice-President, Dr. W. McG. Dollerhide, were unable to attend this meeting because of sickness.

A very interesting scientific program was rendered. Dr. Edgerton read a paper on "Cerebro-spinal Meningitis", which was discussed by Doctors Masterson and Burgoyne. Dr. Palmer presented a paper on "Measles", which was discussed by Doctors Ferguson, Davis, Burgoyne, Sevier and Evans.

The name of Dr. Jno. L. Kelly, of Oak Grove, was proposed for membership and he was unanimously elected to membership in the Society.

The next meeting of the Society will be held in Oak Grove on Tuesday, April 4, 1933.

G. Douglas Williams, M. D.,
 Secretary.

SHREVEPORT MEDICAL SOCIETY

The regular monthly meeting of the Shreveport Medical Society was called to order at 8:05 by the President, Dr. F. W. Walke, March 7, 1933.

Roll call revealed sixty-six members and visitors present.

After reading of the minutes of the previous meeting the report of the secretary was presented.

A communication from Dr. Emmett Irwin, chairman of the Committee on Federal Hospitals from the Orleans Parish Medical Society, and a copy of a resolution passed by that society, were read. These outlined the abuse of the Federal Hospitals existing at present, and were directed toward alleviation of these conditions.

A reply from Dr. Roy Harrison, Secretary of the State Board of Medical Examiners, relative to our request for reduction of the registration fee, promised consideration at the next Board Meeting.

The application for membership of Dr. Leon Fowler Gray, was presented.

The treasurer's report revealed that dues had been paid by 52 members, and the bank balance, \$269.34.

The scientific program was opened with the presentation by Dr. S. W. Boyce, of two cases of spinal cord tumors. The essayist very ably discussed the diagnostic measures, operative treatment, and progress of the cases. Discussion was opened by Dr. D. L. Kerlin, and continued by Drs. J. D. and R. C. Young, and Edwards.

As guest speaker the society heard Dr. J. J. Singer, of St. Louis, who presented a most interesting as well as instructive paper on the Diagnosis of Unusual Chest Conditions. The paper was well received, and discussed freely by Drs. Gilmer, Gowen, Garrett, Lloyd, and W. S. Kerlin.

New Business—The committee having reported favorably upon the application for membership of Dr. Stanley A. Hill, the society voted unanimously to accept the report, and Dr. Hill was elected to membership.

A committee consisting of Drs. Atkins, W. S. Kerlin, and Fleming, was appointed to consider the application of Dr. Gray.

The resolution from the Orleans Parish Medical Society was discussed by Dr. W. S. Barrow, and Dr. B. C. Garrett. Upon the motion of Dr. Barrow, the resolution was accepted, but no definite action taken.

There being no further business the meeting was adjourned.

Shreveport Medical Society,
 J. E. Knighton, Jr.,
 Secretary.

NEWS NOTES

Dr. H. W. E. Walther, head of the department of urology, Southern Baptist Hospital, addressed the South Mississippi Medical Society on March 9, at Stafford Springs, Miss., on the "Present Status of the Procedures Advocated for the Relief of Prostatism."

Many Shreveport physicians attended the meeting of the Tri-State Medical Meeting held in Marshall, Texas, March 15-16. Dr. J. D. Young was elected vice-president, and Dr. Paul D. Abramson, councillor from Louisiana, for the coming year.

Dr. Oscar W. Bethea addressed the Pike County Medical Society at Mississippi on "Physical Examination of Chest Diseases", and followed this with a clinic on heart disease.

On March 9, 1933, Prof. T. B. Sellers, of the faculty of the Graduate School of Medicine of The Tulane University of Louisiana, addressed the meeting of the South Mississippi Medical Society at Stafford Springs, Miss.

Prof. Sellers also addressed the meeting of the Pan-American Medical Society held at Dallas, Texas, on March 28, 1933.

Dr. Alfred S. Burdick, President of the Abbott Laboratories, died last month. The magnificent plant of the Abbott Laboratories has been largely the result of Dr. Burdick's genius and wisdom.

The National Tuberculosis Association state that they have a limited number of copies of the translation of Kochs' original article on "The Aetiology of Tuberculosis." This translation was brought out to commemorate the fiftieth anniversary of the discovery of the tubercle bacillus. The book may be purchased from the association for fifty cents per copy.

The Southern Interurban Gynecological and Obstetrical Society, had its third meeting at the Peabody Hotel, in Memphis, Tennessee, February 13, preceding the meeting of the Mid-South Post Graduate Medical Assembly. The following new officers were elected: Drs. W. T. Pride, Memphis, Tennessee, President; R. A. Johnston, Houston, Texas, Vice-President; Percy H. Wood, Memphis, Tennessee, Secretary-Treasurer.

AMERICAN ASSOCIATION FOR THE STUDY OF GOITER

The annual meeting of this organization will be held in the South at Memphis, May 15-17. An excellent program has been arranged by the committee in charge. Speakers are coming from all over the country, and include such men as Hertzler of Kansas; Frazier of Philadelphia; Bartlett of St. Louis; C. H. Mayo of Rochester; Pemberton of Rochester; as well as numerous others whose names are well known in conjunction with study on the various problems of goiter.

MEDICAL COLLEGE OF VIRGINIA, RICHMOND, VIRGINIA

The participants in the Stuart McGuire Lecture-ship series at the Medical College of Virginia, Richmond, April 25-27, 1933, will be Dr. Ronald T. Grant, Department of Clinical Research, University College Hospital Medical School, London, who will give three lectures on the "Pathology of Endocarditis," and another lecture on the "Arteriovenous Anastomoses in Human Skin"; Dr. Louis Hamman, Johns Hopkins University, who will give a clinical-pathological conference; Dr. Tinsley Harrison, Vanderbilt University, who will lecture on cardiac dyspnea; and Dr. Paul White, Harvard University, who will give a clinic.

INFECTIOUS DISEASES OF LOUISIANA

The Bureau of Epidemiology of the Louisiana

State Board of Health reports the following morbidity rates for the State of Louisiana. For the week ending February 18, there were reported: Fifty-one cases of influenza, 46 of whooping cough, 43 of syphilis, 32 of pneumonia, 27 of measles, 19 of pulmonary consumption, 16 each of cancer and diphtheria. For the following week ending February 25, 76 cases of syphilis were reported, 50 of tuberculosis, 43 each of gonorrhea and measles, 25 of pneumonia, 22 each of cancer and diphtheria, and 17 of typhoid fever. Two cases of cerebrospinal meningitis were reported this week, and one of tularemia. For the week ending March 4, there was an increase in the number of case of measles, 51 being reported. Syphilis was reported in 36 instances, 22 of pneumonia, 16 of pulmonary tuberculosis, and 17 of cancer. Two cases of undulant fever and one of tularemia were also reported. For the following week, that of March 11, 56 cases of influenza were reported, 49 of syphilis, 40 of measles, 28 of tuberculosis, 26 of pneumonia, 23 of diphtheria, 21 each of cancer and gonorrhea, and 18 of scarlet fever. There was also reported for this week 4 cases of typhoid, one each of undulant fever, cerebrospinal meningitis, and tularemia.

HEALTH OF NEW ORLEANS

The Department of Commerce, Division of Vital Statistics, has issued the following weekly reports concerning the health of New Orleans. During the week ending February 18, the death rate was somewhat higher than for the previous weeks in the year, and higher than the entire record of 1932, in which the figure of 15.3 was obtained. There were in the City, 151 deaths, divided 104 white, and 57 colored, giving a rate for the week of 17.4 and the two races 15.9 and 21.3 respectively. The infant mortality rate this week was 67. For the next week ending February 25, the rate was approximately the same. There were 158 deaths, giving a rate of 17.1. One hundred of these deaths were in the white race, whose rate was 15.3, and 58 in the colored, giving a death rate of 21.7. The infant mortality rate was 67, that is there occurred 12 deaths in children under one year of age per thousand estimated live births. The death rate in the City of New Orleans fell considerably the week ending March 4. It was 14.7 as a result of 136 deaths, with the astounding low rate of 10.1 in the white population, whereas the colored rate was 26.2, 66 deaths occurring among the white race, with 70 in the colored. For the week ending March 11, the death rate jumped very considerably, it being 20.8 as a result of 192 deaths in the City, distributed white 121, with the rate of 18.5, and colored 71, with a rate of 26.5. The infant mortality rate this week was quite low. For the City as a whole, it was 39, divided, white 27, and colored 61.

MEDICAL WOMAN'S NATIONAL ASSOCIATION

Dr. Clotilde Jauquet, New Orleans, has announced a program for the meeting of this organization in conjunction with the American Medical Association in Milwaukee from June 11 through June 16. This is a most extensive program, filled with attractive entertainments, with addresses by prominent women physicians from throughout the country. Dr. Jauquet believes that more women physicians will attend the American Medical Association meeting if they knew about this program which is too extensive to publish in full in the Journal.

WOMAN'S AUXILIARY

The General Chairman of the Woman's Auxiliary to the American Medical Association, Mrs. Rock Sleyster, has announced a most interesting program for the eleventh annual meeting of the Auxiliary, to be held in Milwaukee, June 12-16, 1933. Each day special forms of entertainment have been planned and each day special luncheons and special dinners are to be held.

As there are so many interesting entertainments planned it would be impossible to enumerate all.

WALTER F. CARSTENS was born in Shreveport, Louisiana, in 1875, and died at his home in New Iberia, on February 19, 1933. He was graduated from the Medical Department of Tulane University in 1901, and interned at Touro Infirmary and Charity Hospital in New Orleans. In 1903 he located in New Iberia where he practiced until several months before his death, when a serious heart ailment forced him to give up his work.

Dr. Carstens was active in civic affairs, and at the time of his death was serving as City Health Officer of New Iberia. In previous years he served as Secretary-Treasurer of the Iberia Parish Medical Society. Surviving him are his widow, who was formerly Miss Mary M. Andionico, three sons, two daughters, two sisters and two brothers.

MISSISSIPPI STATE MEDICAL SOCIETY NEWS

MISSISSIPPI STATE MEDICAL ASSOCIATION SIXTY-SIXTH ANNUAL SESSION

ROBERT E. LEE HOTEL, JACKSON,
MAY 9, 10, 11, 1933.

THIRTIETH ANNUAL SESSION OF THE
HOUSE OF DELEGATES
MAY 9—8:00 P. M.

WOMEN'S AUXILIARY
MAKE YOUR RESERVATIONS NOW

gates, the names of such physicians who have been members of the Association for twenty consecutive years, and who, by reason of previous services to organized medicine, are worthy to be especially honored for election to honorary membership, provided these nominations be sent to the secretary of the Association 30 days prior to the annual meeting. Such honorary members shall be carried free of all charges on the rolls of the component societies and of the State Association.

PROPOSED CHANGES IN THE CONSTITUTION

At the 1932 meeting of the Mississippi State Medical Association the Committee on Constitution and By-Laws proposed changes in the constitution. These changes will come up for final disposition at the meeting of the Association, May 9-11, 1933. The proposed changes would make the constitution, in certain Sections of Articles III to VII inclusive, read as follows:

CONSTITUTION

ARTICLE III. Component societies shall consist of those societies which hold charters from this Association.

ARTICLE IV. Section 2—The members of this Association shall be the members of the component medical societies.

Section 3. Guests—Any physician not a resident of this state may become a guest during any annual session upon invitation of a member of the Association, and shall be accorded the privilege of participating in all the scientific work of that session.

Section 4.—Any component society may submit in writing, for presentation to the House of Dele-

ARTICLE V. Section 2—The time and place for holding the annual session shall be fixed by the House of Delegates, but in emergencies, the Council shall have the power to fix, or to change, either the time or the place, or both, of the annual session.

ARTICLE VI. Section 2—The President, the President-Elect and the Vice-Presidents shall hold office for terms of one year. The Secretary, Treasurer, Historian, Editor, and Councilors shall be elected for terms of three years, the Councilors being divided into classes so that three shall be elected each year. All of these officers shall serve until the adjournment of that session at which their successors are elected.

Section 3—The officers of this Association shall be elected by the House of Delegates as the last order of business on the last day of the annual session following the adjournment of the general meeting, but no person shall be elected to any such office who is not in attendance on that annual session and who has not been a member for the past two years.

ARTICLE VII—The House of Delegates shall be the legislative and business body of the Association and shall consist of (1) delegates selected by the component societies, (2) the officers of the Association, and (3) all ex-presidents, provided they still be members of the Association.

T. M. Dye, Secretary,

Mississippi State Medical Association.

Clarksdale,

March 3, 1933.

CONVENTION HEADQUARTERS

"Jackson, Miss.,

"February 27, 1933.

"To the Members of the Mississippi State Medical Association.

"Gentlemen:

"We are delighted to know that the Robert E. Lee Hotel has been selected as headquarters for the meeting of your Association to be held here May 9, 10, and 11.

"It will be a pleasure to again welcome you to Jackson, and to the Robert E. Lee.

"During your meeting the hotel will be yours. On the twelfth floor our large, well-lighted and well ventilated convention hall will be set aside for your main sessions. This auditorium is completely equipped with every modern device for radio broadcasting, sound pictures, and x-ray exhibitions. The committee rooms and the beautiful roof garden on this floor will also be reserved for your exclusive use.

"The mezzanine floor with its several attractive committee and assembly rooms is being turned over to the Ladies' Auxiliary of your organization.

"You will appreciate the advantage of the hotel's location away from heavy traffic noises, assuring you of the quiet so necessary for your sessions. And you will find convenient the adequate, free parking space available at all times for your cars.

"Our regular daily rates will apply throughout the convention—no extras.

"Looking forward with pleasure to seeing you in May, I am,

"Sincerely yours,

"H. O. Pate, Manager."

MISSISSIPPI STATE HOSPITAL ASSOCIATION

The annual meeting of the Mississippi State Hospital Association will be held at the Edwards Hotel, Jackson, Monday, May 8, beginning at 9 A. M. The morning session will include the address of President J. Gould Gardner, Columbia; reports of the board of directors, secretary and treasurer, and reports from standing committees as follows: Community Hospitals, Dr. V. B. Philpot, Houston, chairman; Legislation, Dr. John C. Culley, Oxford, chairman; Charity Hospitals, Dr. B. B. Martin, Vicksburg, chairman; Publicity, Mr. W. Hamilton Crawford,

Hattiesburg, chairman; Minimum Standards, Dr. W. W. Crawford, Hattiesburg, chairman; Nurses and Nursing, Dr. A. Street, Vicksburg, chairman; Membership, Dr. R. J. Field, Centerville, chairman.

Reports will also be received from Mr. W. Hamilton Crawford, representative to the joint meeting of the hospital associations of Tennessee, Arkansas, and Kentucky; and from Dr. R. J. Field, representative to the meeting of hospital association presidents and secretaries with the American Hospital Association, and to the meeting of the Council on Medical Education and Hospitals of the American Medical Association.

A special feature will be an address by Dr. Bert W. Caldwell, Chicago, Executive Secretary of the American Hospital Association.

The afternoon program will include a number of pertinent papers and discussions of interest to hospital people and to the medical profession in general. The meeting will close with a banquet in the evening.

The hospital association meets the day before the opening of the annual session of the Mississippi State Medical Association, and, as in previous years, all members of the medical association are cordially invited to attend and to take part in the discussions.

MISSISSIPPI HOSPITALS

The Mississippi State Hospital Association is endeavoring to compile authoritative information and statistics in regard to the hospitals of the state. It is believed that when the study is complete, it will be of much value to all of the hospitals and will be a real service rendered by the Association. Requests for information were sent to some 80 hospitals in January. To date, replies, more or less complete, have been received from 43. Some interesting facts are already available in regard to some of the private institutions:

BED OCCUPANCY, 1932—AVERAGE DAILY NUMBER OF PATIENTS

No. of Hos.	No. of Beds	Total Beds	Average Beds per Hos.	Total Average Pat'ts per Hos.	Average Bed Occupancy percent
25	15-100	1,091	43.6	317	12.7
15	15-45	441	29.4	136	9.1
10	50-100	650	65.	181	18.1
Hospitals Receiving State Aid:					
13	15-70	428	33.	118	9.1
11	15-42	308	28.	101	9.2
2	50-70	120	50.	17	8.5

SCHOOLS OF NURSING—7932

28 hospitals have 1295 beds—Smallest, 15; largest, 100; average 46.

28 hospitals have 250 bassinets—None, 1; smallest number, 1; largest number, 14; average, 5.

21 hospitals had average daily number of patients, 15; smallest number, 5; largest number, 47.

28 hospitals had total number of patients for the year, 20,745; smallest number, 150; largest number, 2,480; average, 741.

14 hospitals had out-patient clinics. Of these 8 hospitals had a total number of visits, 42,842; smallest number, 390; largest number, 17,676; average, 5,368.

29 hospitals had a total of 333 student nurses; smallest number, 3 (3 hospitals); largest number, 38; average, 11 plus.

Distribution

3 students.....	3 hospitals
5 students.....	3 hospitals
6 students.....	1 hospital
7 students.....	2 hospitals
8 students.....	2 hospitals
9 students.....	3 hospitals
10 students.....	3 hospitals
11 students.....	3 hospitals
12 students.....	2 hospitals
15 students.....	1 hospital
18 students.....	2 hospitals
20 students.....	1 hospital
25 students.....	2 hospitals
38 students.....	1 hospital

29 hospitals employ full-time, 55 registered nurses. One employs none; 12 employ one; 8 employ 2; five employ 3; three employ 4. Average, 2 graduate nurses.

The present standards of training and registration of nurses in Mississippi are satisfactory to 22 hospitals; not satisfactory to one hospital. One hospital suggests that the state require that student nurses receive no pay.

HOSPITAL INCOME—1932

No. of Hosp.		No. of Beds		Per Cent of Pay Patients:			
		Total Beds	Avg. Beds	Paid in full	Paid in part	None Paid	Char. Adm.
28	12-100	1,124	40	52.3			
18	12- 45	474	26	44.8			
10	50-100	650	65	65.9			
27	12-100	1,049	39		23.3		
18	12- 45	474	26		25.2		
9	50-100	575	64		19.7		
26	12-100	1,002	39			11.5	
17	12- 45	432	25			13.2	
9	50-100	570	63			8.3	
26	12-100	1,002	39				13.1
17	12- 45	432	25				16.2
9	50-100	570	63				7.2

It is hoped that all hospitals of the state will cooperate so that the study now under way may include every institution.

CANCER QUACKS

A gentleman from the Fayette neighborhood has just been to me with the following story: Recently two well-dressed men, driving a fine, new car, stopped at a near-by house. One of the men went in, introduced himself as Dr. Mayberry, a Vicksburg oculist, and asked if anyone was in need of his services. The elderly housewife admitted that

here eyes were none too good and submitted to examination, when it was discovered that there was an unusual condition in one of the eyes, the nature of which was unknown to Dr. Mayberry. However, most fortunately, the other man in the car was a celebrated Kansas City surgeon, Dr. W. I. Handlow, and at Dr. Mayberry's suggestion, he was invited to examine the eye.

What might have been expected, happened. Dr. Handlow, who, among other things showed the ring of a thirty-second degree Mason as proof of his integrity, diagnosed a "cancerette" behind the eyeball. He had seen a similar case two days before in Vicksburg, for treating which he had been paid \$1,700.00. There are only four places in the United States where these are properly handled: in Atlanta, in Washington, at the Mayo Clinic and—of course—in Kansas City. Elsewhere such conditions call for enucleation of the eye, but at these four places radium is used. Luckily Dr. Handlow had a \$5,000 bottle of radium in his pocket, and as the poor old lady was in immediate danger of total paralysis unless the "cancerette" were removed, he was persuaded to take it out, charging only for the radium used. This he proceeded to do by putting four drops of the radium into the eye at minute intervals. Usually one or two drops are enough, but this was an extremely tough case. Finally he picked the "cancerette" out with a pair of forceps, showed it to the old lady's husband—whose eyes are none too good, explained that it was deadly poison and would kill anything that ate it, and consigned it to the flames. The old lady doesn't see any better than before, but she is rid of the deadly "cancerette" at a cost of only \$380.00, the price of the four drops of radium. But the bank holiday proved a sad thing for the eminent Kansas City practitioner, for the husband got his second sight next day and stopped payment on the check.

For the honor of the profession be it said that the A. M. A. directory does not contain the name of Dr. Handlow, at Kansas City, or any other place, but, as Dr. Johnston tells me a similar game was in progress near Port Gibson last fall, it seems well to pass the story along.

E. F. Howard.

Vicksburg,
March 7, 1933.

MEDICAL WRITING
(Continued)

From "THE ART AND PRACTICE OF MEDICAL WRITING,"—Simmons and Fishbein. By permission.

"VERBOSITY"

"Verbosity is a blemish in the writings of most of us, and one that makes reading tedious, mars diction and wastes space. The fault can be overcome easily, but not efficiently, in most instances,

until after the paper has been written. Unless one has tried it, one will be astonished at the number of words, phrases, clauses, sentences and, occasionally, paragraphs that can be deleted without affecting the meaning in the slightest degree. Deletions of unnecessary words always improve grammatical construction and style of expression, and make reading with understanding easy.

"Quiller-Conch devotes a chapter in *The Art of Writing* to verbiage. Here is one of his illustrations:

"A clerk of a Board of Guardians had to record a minute relative to the burial of a pauper. The minute reads:

"In the case of John Jenkins, deceased, the coffin provided was of the usual character."

"Sir Arthur pulls it to pieces. First, it is superfluous to tell us that Jenkins is deceased; the fact that he needs coffin is sufficient evidence. Then, In the case of is superfluous, for Jenkins did not have a case; he had, and needed, only a coffin. Further, the coffin was not of the usual character, for coffins have no character. The clerk of the Board of Guardians should have said: "John Jenkins was provided with the usual coffin."

"Here are specimens from real life—from manuscripts submitted for publication in *THE JOURNAL*:

"I do not hesitate to say that in my opinion the gland in this case should not have been removed."

"The first seven words are space takers; the author makes his statement, and the reader cares not whether he hesitated or did not hesitate in making it. In any event, I do not hesitate to say that was bracketed and deleted, and the better and shorter sentence, 'In my opinion the gland in this case should not have been removed,' was printed. In my opinion possibly might have been deleted.

"This from another author:

"It has been a mooted question in the minds of microbiologists whether the gonococcus possesses a capsule."

"What difference there is in this case between a mooted question and one that is not mooted is problematical; mooted was deleted. In the minds of microbiologists carries the idea that only microbiologists are concerned. The sentence was improved by divesting it of verbiage and, when printed, it read:

"It has been a question whether the gonococcus possesses a capsule."

"The purist would have modified this still more and mentioned the microbiologist, making it read: Microbiologists question whether the gonococcus possesses a capsule.

"This from another article describing an apparatus:

"Physicians who have been using radium needles will readily appreciate the difficulties encountered in threading them."

"Who have been, will readily and encountered were deleted, and the sentence read:

"Physicians using radium needles appreciate the difficulties in threading them."

"The introduction to a case report read:

"The following case is reported on account of the unusual occurrence of *Ascaris Lumbricoides* in an adult of sufficient quantity to cause obstruction of small intestine, necessitating resection of intestine.

"Miss R. of A....., Ala., referred to me by Dr. M. S. of, age 36, single, admitted to the hospital at Albany, Ala., Nov. 6, 1922, suffering with intense pain in the abdomen, in the right hypochondriac region. She was a poorly nourished woman and suffering great shock and presented all the symptoms of an intestinal obstruction."

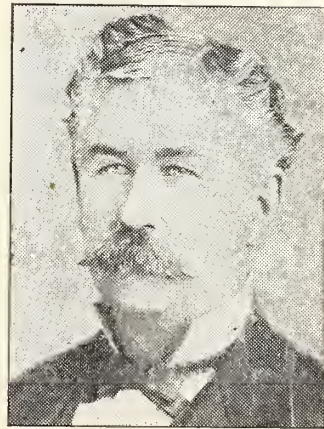
"The first paragraph could be omitted by entitling the paper: *Ascaris Lumbricoides Causing Obstruction of Intestine: Report of A Case in an Adult Necessitating Resection.*

"The case report itself contains a large number of unnecessary words, from the point of view both of good writing and of facts necessary to adequate presentation. Bracketing the unnecessary words for omission, the report would appear:

"Miss R., (of, Ala., referred to me by Dr. M. S. of) age 36, (single, admitted to the hospital at Albany, Ala.,) was seen, Nov. 6, 1922, suffering with abdominal pain in the right hypochondriac region. (She was a poorly nourished woman and suffering great shock and presented all the symptoms of) apparently due to intestinal obstruction."

(To be continued)

LEST WE FORGET THEIR GOOD WORKS



J. M. TAYLOR

Corinth, Mississippi

President, Mississippi State Medical Association,
1873-4

J. M. Taylor was born in Jackson County, Ga., January 12, 1827 and died at his home at Corinth December 27, 1895, of apoplexy, being sick only one day.

Dr. Taylor came to Mississippi with his father in 1839 and settled at Danville, then in Tishomingo County, now in Alcorn. He attained his majority on the parental farm, attending college and working on the farm alternate years. He read medicine under his brother, Dr. W. A. Taylor, attended a course of lectures in Louisville in 1848-9 and graduated from the Jefferson Medical College in 1850, settling in Griffin, Ga., where he married

Miss Mary Cox, October 8, 1851. A short time after this he returned to Mississippi and settled in Rienzi, where he remained until the outbreak of the civil war.

Dr. Taylor entered the southern army as surgeon of the 26th Mississippi and served with this command until the fall of Fort Donelson, when he was captured and after many transfers was finally sent to Johnson's Island where he remained until the close of the war. Returning to Mississippi, he settled at Corinth, where in 1867 he contracted a second marriage, with Miss Sallie Murray, a cousin of his first wife.

Dr. C. M. Taylor, 1910.

Member First State Board of Health.

Judicial Council 1885-6.

TRANSACTIONS

NOTE.—If anyone knows of any additions or corrections that should be made to the above sketch, please communicate with Dr. E. F. Howard, Historian, Vicksburg.

DR. M. H. BELL

I was truly sad when I heard of the death of Dr. Mace H. Bell of Vicksburg. I was in college with Bell. Served in hospital with him and always looked forward with pleasure at seeing him at our meetings. Quiet—without ostentation, dependable, sincere and a true friend. A physician of no mean ability. A good citizen. An ideal husband and father. *Requiescat in pace.*

L. L. Minor

Memphis
Route 4
March 9, 1933.

SECOND COUNCILOR DISTRICT

I read with much interest Mrs. Maggie Hill Barry's remarks in regard to her father, Dr. S. V. D. Hill of Macon. Dr. Hill was for 19 years a partner of my father, Dr. H. A. Minor. He was an exceptionally fine physician and as stated was president of the State Association 1870-71; always active in the work of bettering the profession.

My father's next partner was Dr. John S. Featherston. Dr. Featherston was a captain of cavalry in the Confederate Army; after the war he graduated from a Medical College in Kentucky and settled in Noxubee County. He was one of the best men that I have ever known—a fine doctor—a Christian gentleman. He was the step-father of Dr. James W. Eckford and Dr. Eckford's son is named John Featherston Eckford; both of the Drs. Eckford live in Starkville where they enjoy a fine practice and have the respect of all who know them. Dr. Featherston died some 20 years ago.

My father's next and last partner was Dr. Eu-

gene M. Murphey who still is active in the profession at Macon—a physician of worth—a citizen working to the best interest of his community—a churchman that need not be ashamed.

The Vice-Presidents of the Second Councilor District are as follows: Benton County—J. J. McCowan; Desoto County—J. M. Wright; Lafayette County—W. W. Phillips; Marshall County—Ira B. Seale; Pinola County—G. H. Wood; Tate County—L. L. Wilborn; Tippah County—C. M. Murray; Union County—H. N. Mayes; Yalobusha County—R. J. Criss.

I earnestly wish that each of the above would actively assist the secretaries in getting every eligible member enrolled. The secretaries have sent to the vice-presidents a list of non-members. Secretaries Little, Minor and Eason are hard at work but need the help as stated above.

Also, please, let each county editor get busy and send in some items of news to Dr. Lippincott who is doing everything he can for our Journal.

Likewise, as the publishers request, when writing to an advertiser state that you saw it in the New Orleans Medical and Surgical Journal. It helps.

I hope that our meeting in Jackson, May 9-11, 1933, will be a distinct success; our president Dr. J. M. Acker, Jr., has been active all over the state as have others been locally.

L. L. Minor,
Councilor, Second District.

Memphis, Route 4,
March 9, 1933.

CENTRAL MEDICAL SOCIETY

The Central Medical Society met at the Edwards House in February with 55 members and guests present.

Under clinical cases, Drs. Greaves and Rembert presented a unique case of a Negro girl who was suddenly seized with convulsions and went into a state of coma; physical examination negative except four-plus sugar and spinal symptoms. Spinal puncture showed great pressure and some blood cells, otherwise negative. The final diagnosis was cerebral hemorrhage; complete recovery. Dr. Adkins presented some excellent roentgenograms of cancer of the liver and one of aneurism of the right heart. Dr. Gordon reviewed the surgical literature; discussed by Dr. Darrington.

Under scientific papers, Dr. Womack presented "Anaemias of Infancy and Childhood", with special attention to the anemias of the newborn and the value of direct blood transfusion; discussed by Drs. Jones, Kennedy, and E. L. Green. Dr. Ainsworth gave a discussion of the newer work in prostatic resection showing lantern slides of the instruments and the procedures. Discussed by Drs. Darrington, Britt, Wall, Van Alstine and Eubanks.

The invitation of the Robert E. Lee Hotel to hold our state meeting there was accepted, and committees appointed for the state meeting May 9, 10, and 11.

On motion of Dr. Kennedy, the program committee was instructed to offer a reciprocal program to other local societies, the committee to select our essayists.

The Committee on Constitution and By-Laws called up that matter, laid over as a special order from the last meeting. Several amendments were proposed, so that the entire matter was laid over for the next meeting.

Robin Harris,
Secretary.

Jackson,
March 9, 1933.

COAHOMA COUNTY MEDICAL CLUB

On February 21, the physicians of Coahoma County met in the Council Chamber of the Clarksdale City Hall to reorganize the Coahoma County Medical Club which was dissolved two years ago. This act was the termination of a long felt need for a more regular professional communion than was provided by the Clarksdale and Six Counties Medical Society, which meets only semi-annually.

At the first meeting, the following officers were elected: Dr. T. G. Hughes, President; Dr. C. Z. Ballard, Vice-President; Dr. V. B. Harrison, Secretary-Treasurer. A committee to draft a constitution was appointed by the president and was composed of Drs. T. M. Dye, D. O. Pierce and V. B. Harrison. It was agreed to meet on the first Wednesday of each month at 2:30 P. M., and at that time to hear two scientific papers or a clinic. The appearance of the members on the program were to be in alphabetical order of rotation.

The second meeting was held on March 1, at which time Dr. J. L. Levy read a paper entitled "Urology and the General Surgeon". The paper was well discussed. The second essayist was unable to appear.

V. B. Harrison,
Secretary.

Clarksdale,
March 8, 1933.

DELTA MEDICAL SOCIETY

The Delta Medical Society will hold its next meeting in Greenville, Wednesday, April 12. Everyone is urged to attend. Good Papers. Good Eats. Good Time.

STOP LOOK READ

The entertainment committee is making a big change and will not have the time-honored banquet, but better than that, have arranged for a buffet sup-

per at the Country Club, with plenty of entertainment before, during and after.

John G. Archer,
County Editor.

Greenville,
March 8, 1933.

EAST MISSISSIPPI MEDICAL SOCIETY

The East Mississippi Medical Society held its regular bi-monthly meeting on the mezzanine floor of the Lamar Hotel, Meridian, Thursday afternoon, February 16. A feature of this meeting was the speaking of Dr. Henry G. Rudner and Dr. Eugene Johnson of Memphis, Tenn., associates in the practice of medicine and surgery and both men of recognized ability and high standing.

The scientific program rendered was as follows: Symptoms of Colon Dysfunction; Diagnosis and Treatment.—Dr. Henry G. Rudner, Memphis, Tenn.

Discussed by Drs. Eugene Johnson, Leonard Hart, T. D. Bourdeaux and E. L. Richardson.

Some Phases of the Relationship of Physicians to Dentists.—Dr. J. H. Brown, dentist, Newton.

Discussed by Drs. M. L. Jones, dentist; K. T. Klein, H. L. Arnold and Dudley Stennis.

Goiter.—Dr. H. Lodry Rush, Meridian.

Discussed by Drs. Leonard Hart, W. H. Banks, W. B. Hickman, F. G. Riley, L. V. Rush and H. D. Bourdeaux.

Drs. F. G. Riley, T. D. Bourdeaux, and W. H. Banks were appointed as a committee to study the case of a little boy five years of age with lesions about his hands, feet and ears. Dr. Banks gave the history of the case. Drs. Riley and Bourdeaux discussed same, offering as their clinical diagnosis fungus infection and advising further study and examination to confirm diagnosis.

Resolutions of respect to the late Dr. Bennett Deason Pace as prepared by a committee of Drs. W. J. Anderson, H. S. Gully and E. B. Key were presented to the society by Dr. Anderson and adopted.

On motion by Dr. I. W. Cooper the society accepted an invitation from the Central Medical Society to exchange essayists for one meeting this year. Dr. Leonard Hart was selected as essayist to meet with the Central Medical Society at Jackson, the first Tuesday in May.

Dr. Dudley Stennis, President, presided over the meeting.

The next regular meeting is to be held in Meridian, Thursday, April 20. A program for this meeting has not been prepared at the time of this writing.

T. L. Bennett,
Secretary.

Meridian,
March 9, 1933.

DR. BENNETT DEASON PACE

Bennett Deason Pace, son of Bennett Rose and Martha Deason Pace, was born at Bailey, Miss., February 17, 1864, to the music of Sherman's drums. He finished his literary education at Cooper's Normal College, Daleville, Miss., and, as a stepping stone to medicine, taught in the schools of Lauderdale County. On November 11, 1896, he was married to Alice Welborn, daughter of Dr. and Mrs. D. M. Welborn, Meridian, Miss., and was actively engaged in practice in Lauderdale and adjacent counties. He was a member of the county and state medical associations. In 1924 he moved to Poplar Springs, Meridian, Miss., continuing his practice until his death, August 20th, 1932.

Whereas, it has been the will of Almighty God to take from us one of our oldest and best esteemed friends and physicians, and, whereas, a place has been left unfilled in the ranks of our profession, it behooves us who are left behind to prepare the following resolution:

That, it is the feeling of this association that Dr. Pace's death has caused a loss to the community and medical profession that will be left for years to come.

That, it is a loss to his family which no one can fill.

That, the medical profession of East Mississippi and Lauderdale County regrets the passing of our loving friend and physician.

And that, a copy of these resolutions be published in the New Orleans Medical and Surgical Journal, a copy be kept in the minutes of the local society, and a copy be sent to his family.

W. J. Anderson, Chairman

H. S. Gully

E. B. Key

Adopted by the East Mississippi Medical Society.
February 16, 1933.

T. L. Bennett,
Secretary.

HARRISON-STONE-HANCOCK COUNTIES MEDICAL SOCIETY

March Meeting

Will be held at the home of Dr. A. P. Smith,
S. Beach Blvd., _____ next to convent

Bay St. Louis

Wednesday, March 1, 1933 at 7:30 P. M. Dr.
Smith is arranging for a real good meeting.
DON'T FORGET.

E. A. Trudeau,
Secretary-Treasurer.

ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY

The regular monthly meeting of the Issaquena-

Sharkey-Warren Counties Medical Society was held at the Hotel Vicksburg on March 14, at 7 P. M. with twenty members and two guests present.

The scientific program included the following, prepared by Dr. R. A. Street, Jr., Chairman:

1. The D'Amato Test (Lantern Slides).—Dr. L. S. Lippincott.

Discussed by Drs. J. A. K. Birchett, Jr. and P. S. Herring. Dr. Lippincott closed.

2. A Brief Discussion of Jaundice With Case Reports (Lantern Slides).—Dr. R. A. Street, Jr.

Discussed by Drs. J. W. Barksdale, W. H. Parsons, P. S. Herring and A. Street. Dr. Street closed.

3. Some Acute Abdominal Conditions.—Dr. J. W. Barksdale, Jackson.

Discussed by Drs. W. C. Pool, S. W. Johnston and H. H. Maralson. Dr. Barksdale closed.

The president announced a committee on menu for the monthly meetings as follows: Dr. S. W. Johnston, Chairman; Dr. E. F. Howard, Dr. L. J. Clark.

The next meeting of the Society will be held on Tuesday, April 11, at 7 P. M., Hotel Vicksburg. The Committee in charge of the program consists of Drs. J. B. Benton, H. H. Haralson, S. Myers, and G. M. Street.

NORTHEAST MISSISSIPPI THIRTEEN COUNTIES MEDICAL SOCIETY

First Quarterly Meeting,

1933

at

Macon, Dreamland Theater, 2 P. M.

PROGRAMME

Meeting Called to Order,.....President, F. L. McGahey
Invocation.....Rev. R. D. Pearson

Reading and Adoption of Minutes of Last Meeting:
"Infantile Paralysis",.....Dr. E. Laurence Scott,
Birmingham, Ala.

"Herpes Facialis with Lesions in Gasserian and
Merkel's Ganglia,".....Dr. J. P. Lilly, Tupelo.
General Discussion.

"Tracing the Fraternal Concept to a Professional
Attitude,".....Dr. T. H. Rayburn, Pontotoc
General Discussion.

"Cardiospasm",.....Dr. W. M. McRea, Corinth
General Discussion.

J. M. Acker, Jr., Secretary.

Aberdeen,
March 15, 1933.

SOUTH MISSISSIPPI MEDICAL SOCIETY

The South Mississippi Medical Society held its regular March meeting at the Stafford Springs Hotel, Stafford Springs, on the afternoon of Thursday, March 8. In spite of the _____ and the bank holiday we had a very good attendance

and a most pleasant and profitable meeting. The scientific program was as follows:

"Present Status of the Various Surgical Procedures Advocated for the Relief of Prostatism."—Dr. H. W. E. Walther, New Orleans, La.

"Office Gynecology."—Dr. T. B. Sellers, New Orleans, La.

"Sinus Infection and Their Interests to the General Profession."—Dr. John C. O'Gwyn, Jr., Mobile, Ala.

"Dermatophytosis of Extremities. Its Treatment by Roentgen-Ray."—Dr. H. G. McCormick, Laurel.

"The Proper Care of the Infant During the Twenty-four Hours to Insure a Normal Child."—Dr. Joe E. Green, Laurel, Miss.

Immediately after the program the society enjoyed a most sumptuous banquet served by Dr. and Mrs. E. M. Gavin who at present are in charge of Stafford Springs. This meeting from every standpoint was a very pleasant and instructive one.

We had about thirty-five doctors present.

J. P. Culpepper, Jr., Secretary.

Hattiesburg,
March 11, 1933.

TRI-COUNTY MEDICAL SOCIETY

The regular meeting of the Tri-County Medical Society was held at Wesson, March 14. The meeting was called to order by the president, Dr. J. W. Wilson, of Monticello.

Dr. F. J. Underwood of the Mississippi State Health Department delivered an address before the student body and faculty of the Copiah-Lincoln Junior College on the subject of "The Economy of Public Health."

The Medical Society members and their visitors were served a good dinner by the domestic science class of the Junior College after which they were favored with a nice program of music by some of the talented students under the direction of Mrs. James Ewing.

Papers read by Dr. C. L. Simmons of Hazelhurst, subject "Some Interesting Heart Cases," and Dr. R. S. Savage of Brookhaven, subject "Back Aches," proved to be very interesting and invoked liberal discussions.

Dr. D. W. Jones, now of Jackson, who was a charter member of the Tri-County Medical Society, gave an interesting talk about the early history of the society and some of its honored members. He also gave a report on a very interesting and unusual obstetrical case which he attended under many difficulties. Dr. Jones has the honor of being one of the associate editors of the New Orleans Medical and Surgical Journal.

H. R. Fairfax, Secretary.

Brookhaven,
March 15, 1933.

ADAMS COUNTY, L. Wallin, Editor,.....Missing
ALCORN COUNTY, J. R. Hill, Editor,.....
.....Still Missing
AMITE COUNTY, P. J. Jackson, Editor,.....
.....Still Missing
ATTALA COUNTY, C. A. Pender, Editor,.....
.....Still Missing
BENTON COUNTY, F. Ferrell, Editor,.....
.....Still Missing

BOLIVAR COUNTY

The following doctors from Bolivar County attended the Mid-South Post-Graduate Medical Assembly, which convened in Memphis, February 14-17: D. D. White, Shelby; George W. Owen, Shelby; W. M. Merritt, Boyle; E. R. McLean, Cleveland; J. L. Brookshire, Hushpuckena; E. R. Nobles, Rosedale; C. W. Patterson, Rosedale.

The meeting was well attended and the program was instructive and will undoubtedly be of benefit to all who listened.

We regret to report the death on February 24, of Mrs. H. L. Sutherland, at the home of her daughter, Mrs. R. B. Johnson of Cleveland. Mrs. Sutherland was the beloved widow of the late Dr. H. L. Sutherland, formerly of Rosedale, who was widely known and loved among the medical fraternity throughout Mississippi.

We also regret to report the death of Mr. John V. Lobdell, father-in-law of Dr. E. R. Nobles of Rosedale. Mr. Lobdell died at his home in Rosedale, March 6, regretted by a large circle of friends and relatives.

C. W. Patterson, County Editor.

Rosedale,
March 9, 1933.

CALHOUN COUNTY, W. J. Aycock, Editor,.....
.....Still Missing
CARROLL COUNTY, J. P. T. Stephens, Editor,.....
.....Still Missing
CHICKASAW COUNTY—NO EDITOR
CHOCTAW COUNTY, J. James, Editor,.....
.....Still Missing
CLAIBORNE COUNTY, W. N. Jenkins, Editor,.....
.....Still Missing
CLARKE COUNTY, B. F. Hand, Editor,.....
.....Still Missing
CLAY COUNTY, S. R. Deanes, Editor, Still Missing
COAHOMA COUNTY, A. C. Everett, Editor,.....
.....Still Missing
COPIAH COUNTY, W. L. Little, Editor,.....
.....Still Missing
COVINGTON COUNTY, D. T. Alfred, Editor,.....
.....Still Missing

DESOTO COUNTY

Our society officers are actively at work. At our next meeting the essayists are Drs. Stuart, Card, Brewer, Rhodes and Hammond.

The Mississippi pages in our Journal are very interesting. Let each county editor do his duty in sending in news to the editor.

Let the Vice-President of each county assist the secretary in enrolling every desirable member.

L. L. Minor, County Editor.

Memphis, Route 4,

March 9, 1933.

FORREST COUNTY

Good news is almost as scarce as hens' teeth in Forrest County.

I am glad to report the birth of a son to Dr. and Mrs. J. P. Culpepper, Jr., February 23. He has been given the name of J. P. Culpepper, III.

Dr. Franklin T. Bower enjoyed a few days in New Orleans last week when he attended the Mardi Gras.

We regret to report that Dr. Leo H. Martin is suffering from acute mastoiditis. We hope he will soon be well again.

A large number of the local doctors attended the meeting of the South Mississippi Medical Society at Stafford Spring, March 9.

C. C. Buchanan, County Editor.

Hattiesburg,

March 11, 1933.

FRANKLIN COUNTY, C. E. Mullins, Editor,-----

-----Still Missing

GEORGE COUNTY, R. F. Ratliffe, Editor,-----

-----Still Missing

GREEN COUNTY, Aristophane Graham, Editor,-----

-----Still Missing

GRENADA COUNTY

Since my last report death has invaded our ranks and called to his eternal reward our oldest and best loved physician, Dr. J. W. Young, who passed away on February 15 in his 87th year. Cause of death was carcinoma of prostate. He had been a great sufferer for many months but accepted the inevitable in the same calm and unaffected manner that marked his every relation in life. After an intimate association of more than 42 years I feel that I can speak with assurance of his greatness of character. He was first and preeminently a Christian gentleman of a quiet and unobtrusive disposition, his conduct was always convincing of his sincerity of purpose. Whether in church, his profession or as citizen of the state his ideals were clean and lofty and his devotion to his convictions of duty was sublime. As a physician his life reached its highest perfection. A

tireless worker possessed of a keen intelligence, he was a wise counsellor and attained success in his practice to an enviable degree.

Even in his retirement his interest in medicine never flagged and he kept abreast of its progress. We shall miss him. Peace to his ashes. Honor to his memory.

Of medical matters locally there is not much to say except that the doctors and their families along with everyone else have kept well and able to "enjoy" our poverty.

An unusual event happened in the county a few days ago when a colored woman gave birth to four babies—two boys and two girls. All were well developed and all are living and growing. I don't know whether " "had anything

to do with this but it was certainly a "boost" to the family. One day they had four children and the next day they had eight! Here is hoping that doesn't "spread."

T. J. Brown, County Editor.

Grenada,

March 9, 1933.

DR. J. W. YOUNG

Truly a Prince in Isreal has fallen. As the mortal remains of our beloved physician, Dr. J. W. Young, were laid to rest among those whom he had faithfully loved and served through many long years, his beautiful and saintly spirit winged its flight to his heavenly Father who had sent him eighty-seven years ago into a needy and suffering world.

Whereas, it has pleased an all wise Providence to take him to his reward, we feel a distinct and personal loss in his going away. His wise council, his exemplary life and his unfaltering fidelity to his conception of Christian and civic righteousness will ever be a beacon star to lead us on to higher and nobler endeavor.

Resolved that we extend our condolence and heartfelt sympathy to his bereaved loved ones and that a copy of these resolutions be sent to his family, also published in The Grenada Sentinel.

T. J. Brown, J. K. Avent, J. S. Sharp, R. A. Clanton, E. B. Provine, F. B. Coats, A. S. Hill, E. C. Rouse.

Resolutions adopted by the physicians of Grenada County February 17, 1933.

HANCOCK COUNTY, D. H. Ward, Editor,-----

-----Still Missing

HARRISON COUNTY, G. F. Carroll, Editor,-----

-----Still Missing

HINDS COUNTY

Drs. Verner and Moseley of Jackson recently gave talks before the Pre-Medical Club of Mississippi College at Clinton.

The staff of the Baptist Hospital held its regular monthly meeting March 7, in the dining hall of the hospital. A splendid program was rendered and the usual good meal enjoyed.

Drs. Walker, Wilson, and Barksdale attended the meeting of the Mid-South Postgraduate Assembly recently held in Memphis. They report a good meeting.

Dr. L. B. Neal, who has been confined to bed at the Baptist Hospital on account of an operation on the gall bladder, has returned to his office.

Dr. Darrington, Sr., of Yazoo City, was a business visitor to the capitol city last Saturday. We are always glad to see Dr. Darrington.

The staff of the Jackson Infirmary met the last Thursday evening in February. The largest attendance ever, the best meal and best program were outstanding features.

The doctors of this community are certainly trying to cooperate with the new President, "Don't go away!" We are all doing practice as usual.

Wm. F. Hand, County Editor.

Jackson,
March 6, 1933.

HOLMES COUNTY, R. C. Elmore, Editor,____
____Still Missing

HUMPHREYS COUNTY, G. M. Barnes, Editor,____
____Still Missing

ISSAQUENA COUNTY, W. H. Scudder, Editor,____
____Still Missing

ITTAWAMBA COUNTY, S. L. Nabors, Editor,____
____Still Missing

JACKSON COUNTY

The regular quarterly meeting of the Jackson County Medical Society was held in conjunction with the regular monthly meeting of the staff of the Jackson County Hospital at the hospital on March 9. A goodly number was in attendance and in addition to the transacting of routine business, a number of case reports constituted the scientific program.

Dr. J. F. Busey, who has been practicing in Pascagoula for the past six months, was notified that he had been appointed to a position in the Veterans's Bureau. The Bureau of Standards being located elsewhere, there was no available equipment which was capable of measuring the hesitation with which he accepted the appointment. The doctor has our sincere congratulations.

S. B. McIlwain, County Editor.

Pascagoula,
March 13, 1933.

JASPER COUNTY, J. B. Thigpen, Editor,____
____Still Missing

JEFFERSON COUNTY, R. B. Harper, Editor,____
____Still Missing

JEFFERSON DAVIS COUNTY, G. C. Terrell, Editor,____
____Still Missing

JONES COUNTY, J. E. Green, Editor,____Missing

KEMPER COUNTY, A. M. McCarthy, Editor____
____Missing

LAFAYETTE COUNTY, E. S. Bramlett, Editor,____
____Still Missing

LAMAR COUNTY

I am again going to let you hear from Lamar County. I saw what you had to say about us in last issue of our Journal so I am responding.

Dr. C. H. Tennent of Arkansas is locating at Lumberton. His headquarters is at Southern Hotel. We wish him success.

L. I. Poly, County Editor.

Purvis,
March 9, 1933.

LAUDERDALE COUNTY, C. T. Burt, Editor,____
____Still Missing

LAWRENCE COUNTY, B. S. Waller, Editor,____
____Still Missing

LEAKE COUNTY, I. A. Chadwick, Editor,____
____Still Missing

LEE COUNTY, R. B. Caldwell, Editor, Still Missing

LEFLORE COUNTY

Dr. W. R. Best, Pope, visited his daughter, Mrs. J. H. Collier, February 16.

Drs. Gill and Kelly, Sidon, attended court in Greenwood, February 17.

Drs. J. C. Adams, W. E. Denman, G. Y. Gillespie, Jr., and L. B. Otken attended the Mid-South Postgraduate Assembly in Memphis recently.

Dr. C. J. Pittman, Ruleville, was a recent visitor to Greenwood.

Dr. H. L. Shannon, Longwood, Washington County, was in Greenwood, February 28.

Jean, son of Dr. W. E. Denman, is recovering at his home on River Road, from an appendectomy performed at the Greenwood-Leflore hospital last week.

Dr. Theodore Austin of this place has recently been appointed assistant resident physician at the Rochester General Hospital, Rochester, N. Y.

Miss Ruth Alexander, daughter of Dr. C. D. Alexander, Vaiden, technician of the malarial laboratory of the county health unit, will be married to Mr. James Townes of Minter City, March 15.

Mrs. Catherine Carroll has been appointed to succeed Miss Alexander as local registrar of births and deaths at this place.

Dr. and Mrs. S. L. Brister, Jr., are the proud parents of a daughter, born to them at the Greenwood-Leflore Hospital, March 7. This is their first child.

Mrs. J. H. Kennedy, wife of Dr. J. H. Kennedy, Pinola, is visiting her sons, Drs. J. P. and H. W. Kennedy, at this place.

Dr. L. A. Barnett has moved from Market Street to 808 West Washington Street.

Dr. Robert Dickins, assistant surgeon to Drs. Gamble Bros. and Montgomery Clinic at Greenville, has accepted an appointment at the Detroit Eye, Ear, Nose and Throat Hospital, Detroit, Mich.

W. B. Dickens, County Editor.

Greenwood,

March 8, 1933.

LINCOLN COUNTY, W. H. Frizell, Editor,-----

-----Still Missing

LOWNDES COUNTY, J. W. Lipscomb, Editor,-----

-----Missing

MADISON COUNTY, Robert Smith, Editor,-----

-----Still Missing

MARION COUNTY, J. G. Gardner, Editor,-----

-----Still Missing

MARSHALL COUNTY, D. R. Moore, Editor,-----

-----Still Missing

MONROE COUNTY

Nothing of unusual interest to the doctors of the state has transpired in Monroe County since my last report. The ground hog seems to have known his business when he fled to cover; for our weather has been bad—that is, it has been cold and rainy. But possibly a blessing in disguise comes with the bad weather, since the weavils may have been killed out to some extent.

Farm work is backward this year and our doctors are vitally interested in the crop situation, since our pay may have to be taken in sorghum, peas and possibly a few spare ribs and backbones. Of course, I shall not use the “forbidden” word in this communication, but unless we are human ostriches we are forced to see all is not well.

Since my last letter was sent you, Dr. T. D. Summerford, of Smithville, had the great misfortune to have his home and practically all his furnishings burned. He carried only a small amount of insurance so our sympathy goes out to him.

Just two weeks ago Amory people were bowed in universal and profound sorrow because of the death of Dr. R. S. Kirk. Dr. Kirk, I dare say, was genuinely loved by more people than any other man who ever lived and labored in Amory. He was not one of the state's best known physicians, but he was a humanitarian and a home loving soul. He worked for all classes of people, but chiefly for

those who were less able to pay for his service. He never refused to serve because of inability to pay. In fact he did not seem to consider the matter of pay. His only concern was for human suffering and of course, many people who were amply able to pay him took advantage of his generosity and never paid him for his service. All he ever received for forty years of hard work was a bare living. His children, fortunately, are grown and can care for themselves. But his widow, a second wife whom he married in 1922, is left penniless. She was a trained nurse and was in all respects a helpmeet indeed. She was faithful to the end of a distressing illness. He died of carcinoma of the cecum. He needs no monument; for the love of our people rests upon his memory as a sacred benediction.

Dr. I. P. Burnside, another Amory physician, and his splendid wife, have been greatly distressed for about a month. Their only daughter, Mrs. Joe Dennam, whose home at present, is in Hattiesburg has been seriously ill in the Gilmore Sanitarium in Amory. She underwent a very heavy and dangerous operation which was followed by an acute nephritis. Mrs. Dennam is a beautiful young woman whose life and disposition are as beautiful as her face. She is a dear friend of my own daughter—in fact she is almost as dear to me as if she, too, were my daughter. (I commend her and her splendid husband to my doctor friends who live in Hattiesburg). Inasmuch as you do it unto them you will do it unto me. I am most happy to say that the outlook for her recovery now seems to be good. Her mother has been quite sick for some days. This, no doubt, is largely due to the fact that she was under such heavy strain for so long a time.

I hope no doctor will forget that our Society, the Northeast Mississippi Thirteen County, will convene on the third Tuesday in this month (March) at Macon. We hope to see you all on that occasion.

I drove over to Grenada and saw my good friend, Dr. Young, buried two weeks ago. One of our best and greatest is gone from us. We may not see his like again soon.

G. S. Bryan, County Editor.

Amory,

March 2, 1933.

MONTGOMERY COUNTY, J. O. Ringold, Editor,-----

-----Still Missing

NESHOBA COUNTY, W. R. Hand, Editor,-----

-----Still Missing

NEWTON COUNTY, S. A. Majure, Editor,-----

-----Still Missing

NOXUBEE COUNTY, E. M. Murphey, Editor,-----

-----Missing

OKTIBBEHA COUNTY, J. F. Eckford, Editor,-----

-----Still Missing

PINOLA COUNTY, G. H. Wood, Editor,---

----- Still Missing

PEARL RIVER COUNTY, G. E. Godman, Editor,---

----- Missing

PERRY COUNTY, B. T. Robinson, Editor,---

----- Still Missing

PIKE COUNTY, T. Paul Haney, Jr., Editor,---

----- Missing

PONTOTOC COUNTY

Dr. A. H. McGregor of Randolph was in Pontotoc a few days ago and informed me that his daughter, Miss Pauline, had just entered training for a nurse in the Houston hospital.

Dr. Ruffin Longest of Arkansas is here visiting his brother, Mr. John I. Longest.

Dr. E. G. Abernethy, Algoma, recently underwent in operation at the Baptist Hospital, Memphis. We are glad to report that the doctor is rapidly recovering.

Dr. J. M. Hood, Houlika, was in our city yesterday and reports that he is not very busy these days.

Very little sickness reported in this county.

R. P. Donaldson, County Editor.

Pontotoc,

March 8, 1933.

PRENTISS COUNTY

Jean, the young son of Dr. and Mrs. R. B. Cunningham of Baldwyn was operated on recently for appendicitis and at this time is convalescing nicely.

Drs. J. L. Kellum and R. B. Caldwell of Baldwyn were professional visitors to Booneville last week.

Dr. W. G. Anderson spent a few days in Jackson during the last part of February.

R. B. Cunningham, County Editor.

Booneville,

March 9, 1933.

QUITMAN COUNTY

We have about the usual amount of sickness that we have during this season of the year.

I suppose most of the doctors of the county will attend the meeting of the Clarksdale and Six Counties Medical Society in Clarksdale on March 15. We always have an enjoyable time.

Dr. James Walker afforded us quite a bit of excitement recently by having his car stolen. The thief in his hurried get away ran over a cow on which the doctor held a mortgage. He recovered the car in a badly damaged condition in Cold-water river, but it was just too bad about the cow.

Eric A. McVey, County Editor.

Lambert,

March 11, 1933.

RANKIN COUNTY, W. H. Watson, Editor,---

----- Still Missing

SCOTT COUNTY, W. C. Anderson, Editor,---

----- Still Missing

SHARKEY COUNTY

There is not much news from this county this month, but the editor wishes to know for sure if we are all up here and still trying to "carry on" in our usual way.

We have all been at home and not any members of the family have been visiting.

Hope to have some real news for you next month, provided the editor will permit me to report again.

W. C. Pool, County Editor

Cary,

March 10, 1933.

SIMPSON COUNTY

The Simpson County Maternity Center is doing much toward the welfare of our indigent women.

Typhoid and diphtheria cases have been few for the past two years. Ninety per cent of the cases were among a certain religious sect or their sympathizers. With only a part-time health officer we must hand it to him for the wonderful amount of work he does.

All doctors from this section of the country who attended the Mid-South Post-Graduate Medical Assembly say it was one of the most instructive meetings ever held in Memphis. The fact is we outdoor doctors need more outdoor instruction.

The morale of our country being shaken, the doctors handicapped, sickness just the same, places us all in a "mell of a hess;" yet our sincere, sane, thinking doctors are going to carry on regardless of conditions.

Here's hoping every doctor in Mississippi will see his way clear to attend the meeting of the State Medical Association in May.

E. L. Walker, County Editor.

Magee,

March 7, 1933.

SIMPSON COUNTY—SANATORIUM, S. F. Strain,

Editor, ----- Still Missing

SMITH COUNTY, R. B. Boykin, Editor,---

----- Still Missing

STONE COUNTY, S. E. Dunlay, Editor,---

----- Still Missing

SUNFLOWER COUNTY, R. M. Donald, Editor,---

----- Still Missing

TALLAHATCHIE COUNTY

No news of interest. The physicians and hospitals of this part of the state have been hard hit for the last two or three years, especially those adjacent and in the Tallahatchie basin, where the flood waters from the Tallahatchie, Cold Water and adjacent streams have menaced travel, farming and all work for the major part of the last three years.

The R. F. C. has been taking care of minimum

hospital and drug bills for emergency cases which has been of great help to the needy and materially helped the hospitals, drug stores and physicians.

Mrs. A. C. Harrison of Charleston attended the inauguration ceremony of President Roosevelt on the 4th. Mrs. Harrison will visit other points before returning to Charleston.

The membership of the Clarksdale and Six Counties Medical Society will have its semi-annual meeting March 15 and it is hoped that there will be a good attendance. Many of our members are behind with their dues and are not attending the meetings. We hope that they will send in their dues and, in case they are not in a position to do so, at this time, be on hand for the meeting, and if possible, renew their membership at that time. We hope to have a very interesting and profitable meeting.

Dr. J. G. Gardner, President of the State Hospital Association, is expecting to be with us at the next meeting of the Clarksdale and Six Counties Medical Society at which time he will discuss some vital questions relative to some needed changes in our state hospital laws:

We are glad to note that most of the editors of the counties comprising the Clarksdale and Six Counties Medical Society are sending in news. We hope that this move will grow until every county in the state will be represented.

J. W. Moody.

Charleston,
March 6, 1933.

TALLAHATCHIE COUNTY, T. F. Clay and J. E. Powell, Editors, _____ Still Missing
TATE COUNTY, W. D. Smith, Editor, _____ Still Missing

TIPPDAH COUNTY

Disease and accident, like time and tide, play no favorites as far as it applies to our profession, and we this season have had a share of disabling visits. However, we are truly glad to know that our doctors' families have been blessed in recoveries.

Mrs. E. J. Green suffered severe burns from explosion of an oil can as she was kindling a fire in her heater, suffering greatly for some days, but has gotten well onto recovery.

Dr. J. H. Pearce has been sick enough to have to go to hospital, which means he was right ill, as it has seemed, up to this time, he could not be kept from working, having been for many years an unusually active practitioner.

Dr. J. I. Mayfield was very sick in January and February with pneumonia, giving his many friends much alarm. The taking of the advice to rest seems to have restored him and he is actively at work again.

In this connection we think it not amiss to in-

clude in our notes our co-laborers in preservation of health, our dentist friends. Dr. J. D. Burns, who practised here almost 50 years and was so much loved, passed to his reward just before Christmas, and now Dr. A. Hudson, of New Albany, who has raised in Tippah, and who has so many friends in our profession here, is confined to his bed with a heart attack. The last news is encouraging and we are hoping he may soon be restored and give us the great benefits of his experience and help.

Drs. Adams, Mayfield, Marsh, Tate and Murry were in Memphis recently, to hear the noted men who were there on the program of the Mid-South Assembly, and all report a great meeting. Where it is possible we feel it the duty of every doctor to attend at least a part of such meetings.

Miss Mary M. Murry, who is teaching in Kosciusko, was home Friday to Monday, where she had as visitors some friends with whom she was in school at Northwestern University.

We are having an unusual amount of scare from rabid dogs; several taking treatment, and if dog lovers do not take the precaution of confining their much prized (?) animals we will very likely have a continuation of cases.

C. M. Murry,
County Editor.

Ripley,
March 9, 1933.

TISHOMINGO COUNTY, T. P. Haney, Editor, _____ Still Missing
TUNICA COUNTY, M. B. Jernberg, Editor, _____ Still Missing
UNION COUNTY, H. P. Boswell, Editor, _____ Still Missing
WALTHALL COUNTY, B. L. Crawford, Editor, _____ Still Missing

WARREN COUNTY

Dr. Walter E. Johnston has accepted a position at the Marine Hospital in Boston, Mass. It has been stated that Dr. Johnston will leave shortly for his new position.

Dr. Jack Birchett, Jr., was in New Orleans attending Mardi Gras and states that he had a wonderful time.

Dr. Augustus Street was recently in Atlanta where he attended the South Eastern Medical Convention which was held there.

Mrs. Henry Rudner, wife of Dr. Henry Rudner of Memphis, was a visitor to Vicksburg. Mrs. Rudner is a native of Vicksburg.

Dr. Guy Sanderson made a professional trip to the Capitol City, Jackson, this month. His stay was but a few days.

Dr. W. G. Weston plans on leaving Vicksburg. It is stated that he intends to open an office in

Kentucky, his practice being limited in internal medicine.

Dr. Nathan Lewis motored to the nearby town of Edwards to see his old college chum, Dr. H. E. Edmondson, who has recently opened an office there.

Nathan B. Lewis,
County Editor.

Vicksburg,
March 8, 1933.

WASHINGTON COUNTY

Born to Dr. and Mrs. John F. Lucas on February 18, a baby girl. This young lady has been given the name of Miss Joanne Gee Lucas.

The following doctors attended the meeting of the Mid-South Post Graduate Medical Assembly in Memphis last month: Dr. R. C. Finlay, Glen Allen; Dr. J. S. Sanders, Leland; and Drs. F. M. Acree, J. F. Lucas, D. C. Montgomery, A. G. Payne, and John G. Archer, Greenville.

Dr. F. M. Acree gives glowing accounts of a most successful and interesting meeting of the American College of Physicians, held in Montreal, Canada, last month.

We are glad to have Dr. H. A. Gamble home again after a trip to the Carolinas.

The following invitations were issued by the Eli Lilly Co. to the doctors of this vicinity.

A NEW SOUND FILM

You are cordially invited to attend a presentation of a new sound film on the production and clinical application of Iletin (Insulin-Lilly) at the King's Daughters' Hospital, Greenville, Miss., March 24, at 8 P. M.

This proved to be a most instructive movie show, and was enjoyed by all who were present. There were many diabetic patients there by special invitation, who expressed their appreciation of the opportunity of having this most interesting subject brought to them in such an instructive manner. We of this section feel that we owe a great deal to Eli Lilly for their efforts in presenting this picture.

John G. Archer,
County, Editor.

Greenville,
March 8, 1933.

WAYNE COUNTY, W. P. Gray, Editor,---

-----Still Missing

WEBSTER COUNTY, W. H. Curry,-----Missing

WILKINSON COUNT, S. E. Field, Editor,---

-----Missing

WINSTON COUNTY

Dr. W. W. Parks and wife were guests of their daughter and son, Mr. and Mrs. John McCauley, at Philadelphia last Sunday.

Dr. M. L. Montgomery and wife were shopping in Jackson the latter part of last week.

Dr. C. A. Kirk of Fearn Springs, was in our city this week. He seemed as usual, full of optimism and happy.

Drs. W. L. Richardson, W. B. Hickman, W. W. Parks and the writer attended the meeting of the East Mississippi Medical Sonciety in Meridian, February 17. We listened to a good program and spent the afternoon pleasantly.

Mr. and Mrs. E. C. Ballard of Starkville, spent last Sunday with their parents, Dr. M. L. Montgomery and family.

Let's us be patient and look for an extreme upward trend in business in the next 60 days.

M. L. Montgomery,
County Editor.

Louisville,

March 9, 1933.

YALOBUSHA COUNTY, G. A. Brown, Editor,---

-----Still Missing

YAZOO COUNTY, C. M. Coker, Editor,---

-----Still Missing

JOSEPH COUNTY

The South Mississippi Medical Society held its regular quarterly meeting at Stafford Springs on March 9 from three to six-thirty P. M. Immediately after which a banquet was enjoyed in the dining room of Stafford Springs Hotel.

A very interesting and instructive program had been arranged and all present enjoyed this meeting, in the quietude of Stafford Springs Resort, very much.

Doctors from all over South Mississippi were present as well as several visitors from Jackson, Mississippi.

Those whose scientific papers were enjoyed were:

Dr. H. W. E. Walther, New Orleans, Louisiana.

Dr. T. B. Sellers, New Orleans, Louisiana.

Dr. John C. O'Gwyn, Jr., Mobile, Alabama.

Dr. H. G. McCormick, Laurel, Mississippi.

Dr. Joe. E. Green, Laurel, Mississippi.

Visitors from Jackson, Mississippi were: Doctor Willis Walley and Doctor Dudley W. Jones.

Everyone expressed delight with the good old Southern Hospitality abounding at Stafford Springs Resort.

E. M. Gavin, M. D.

Stafford Springs, Miss.

March 19, 1933.

WOMAN'S AUXILIARY TO THE MISSISSIPPI STATE MEDICAL ASSOCIATION

President, Mrs. W. C. Pool. Cary.

President-Elect, Mrs. M. L. Van Alstine,
Jackson.

State Convention, Jackson, Robert E. Lee Hotel,
May 9, 10, 11, 1933.

Mrs. Leon S. Lippincott, Vicksburg, Press and
Publicity Chairman.

PROGRAM FOR STATE MEETING

May 9—

- 10 A. M.—Registration
- 3:30 P. M.—Executive meeting.

May 10—

- 9 A. M.—General Meeting—Mezzanine Floor.
- Call to order.
- Invocation.....Mrs. I. C. Knox, Vicksburg
- Address of welcome.
- Response to address of welcome.
- Introduction of guests of honor.
- Address.....Dr. G. S. Bryan, Amory
- Announcements by convention chairman.
- Reports.
- Business.
- Round table discussion.
- 1 P. M.—
- Luncheon (50 cents).
- 5 P. M.—
- Tea (announcement of plate later). All vis-
iting physicians invited.

May 11—

- 9 A. M.
- Call to order.
- Invocation.....Mrs. H. R. Shands, Jackson
- Reports of all committees.
- Unfinished business.
- Election of officers.
- Introduction of new officers.

A MESSAGE FROM OUR PRESIDENT

Friends and Co-Workers of our Auxiliary:

We have come to the close of another year, and it is time to take stock, as it were, of the results of our year's work, to lament our failures, rejoice in our successes and to make new plans for the coming year.

We may not have reached our goal, but surely we have come a long way down the stretch in its accomplishment.

We are proud to be known as the Auxiliary to the Mississippi State Medical Association, composed of our brothers, our sons and our husbands; men among the brainiest and best of the great profession they represent; and we feel that much of the good we may have accomplished we owe to their unflinching interest and sympathetic advice which they gave us at all times.

Some of our work done includes an increase in membership and new auxiliaries organized. Our organization chairman was prevented from putting her splendid plans into effect, but we all made an

effort to assist her and in so doing we now have nine active auxiliaries with an increase in membership. One hundred letters were written and four trips made in behalf of the organization program. We have tried to outline programs when requested, not only for our organization, but for clubs where we are delighted to carry our educational work. Some of the auxiliaries have very unique and helpful year books. Each has tried to carry on the work most suited to its needs and approved by its medical society. We have thoroughly compiled our records and are trying to leave everything so our successors will be able to go forward without any delay. Each chairman will have a complete record of her department. The secretary has a new book with a section for each department; the historian is getting the history into shape to present to us; the press and publicity chairman has a very attractive scrap book and the treasurer has the new card system, which is in use in each auxiliary.

Now as to what your president has done, you well know for each time anything has been accomplished or attempted in behalf of the organization a report has appeared in THE JOURNAL, so, that will not be enumerated here; but, I ask, may I speak of what the year as your president meant to me personally?

When you did me the honor to choose me for your president, I was almost appalled at my ignorance of what I could do in the work. I can truly say that this has been one of the happiest experiences of my life. On my many visits to your auxiliaries, your gracious hospitality has given me an opportunity to know you and yours in a way I could never have known otherwise. The luncheons, teas and the lovely flowers with which you have showered me have meant more than just an official visit. I have learned the truth of the often thoughtlessly quoted couplet:

"When we know each other better,
We love each other more."

Now, I beg for my successor the same loving co-operation you have given me.

I thank you.

Mrs. W. C. Pool,
President.

Cary,

March 6, 1933.

NOTES FROM MRS. PERCY'S FEBRUARY LETTER

"Events have shown without question that the work we are trying to do needed to be done. Standing in the center as it were, and looking out over the branches there is a healthy growth and much fruit appearing as an answer to the earnest sincere efforts of women, whose very lives influenced by the unselfishness of their physician-husbands and the associations they serve, have a higher, nobler

and more generous outlook than can be found among any other group in the world.

"The first of March is surely not too soon to commence thinking of the trip to Milwaukee for the Eleventh Annual Convention of the National Auxiliary.

"The renewal of friendships will mean much to all of us this year for the necessary omission of the Mid-Year Board Meeting, together with the unusually long year of thirteen months have left a sense of an intangible unfilled something that makes us begin to long for the Convention days where we may complete the necessarily unfinished and omitted business. At no other time or place can the problems that vex all branches of our organization be so thoroughly dealt with. Here first hand information from the experiences of others can be gained for the work that lies ahead. The resulting inspiration and joy of both old and new associations to make richer and retrospect of coming years make this opportunity one not to be neglected.

"Please watch for the outline of the program planned by Mrs. L. Rock Sleyster, Convention Chairman and her Committee! As soon as they are announced we urge each State President to broadcast them to the four corners of her State and to encourage and stimulate all members and friends to make every effort possible to join and assist us in trying to make this another link in the chain so perfectly welded together by our predecessors in the Conventions of the past.

"Be on the look-out for Mrs. Sleyster's announcements.

"With eager anticipation of meeting and greeting you.

Mrs. James F. Percy."

MILWAUKEE GREETUS US

"Your coming will be an event; committees are working hard to make this gathering a real success. Until the time that the secrets of the program are divulged, we are going to tell you something about the convention city.

"Indian legend tells us that the 'Hahn-a-waukie' was the naive guttural cry of an Indian brave uttered as he drew his bark canoe from the waters of the present site of the city. In the Ojibwa (Wisconsin) language this name means 'good and beautiful lands.' In different dialects other Indians are known to have called this spot 'Mahn-a-waukie Seepe' or 'gathering place by the river.'"

"Mention was made in the January News Letter that the headquarters would be at the Hotel Pfister. It is a pleasure to tell you that this most desirable hotel is contributing to the Auxiliary the use of its entire seventh floor for our Convention activities."

THE HAND BOOK

"This seems the time and place to make an announcement of this splendid Auxiliary aid. The Handbook is a pamphlet of 44 pages 7½x10½ inches. In addition to the foreword and Historical Sketch the four parts given us: Part I, Reasons for a Women's Auxiliary, and Review of Present Functions; Part II, Administration, Duties and Responsibilities of State Officers and of the State Organization Chairman; Part III, Education, Duties and Responsibilities of the State President, and Chairmen of Program, Hygeia, Public Relations and Press and Publicity; Part IV, the State Convention, Purpose, Program, Factors that Make for Success, and Technique. Helpful instruction and suggestions for county Auxiliary units are given and are involved with those for state officers."

"Mrs. McGlothlan herself says of the Handbook:

"'Know your Auxiliary' is the slogan of the Auxiliary this year. It is believed that a study of this Handbook by present and prospective officers and by all other Auxiliary women as well will tend to unify our organization both as to purpose and as to methods of work. In our letters to state presidents and chairmen earlier in the year it was suggested that the Handbook be used as a guide and in addition that it be used as a basis for conference discussions in county Auxiliaries, at state conventions and at the national convention. We trust that constructive suggestions growing out of such conferences will be made a matter of record for future use when another revision is found desirable."

"At present we trust that it may serve as a guide for new officers and chairmen, as a source of helpful information to all members and that those with experience will co-operate in making it more complete and continually better suited to our needs. To whichever class you belong you can make your contribution only by a thorough study of the Handbook.

"If you do not have your copy already, ORDER it NOW from Mrs. J. Newton Hunsberger, 514 West Main Street, Norristown, Pennsylvania. The price of forty cents for a single copy or \$4.50 for a dozen copies is being charged to help defray the expense of printing and distribution."

OUR PREVENTORIUM

A cherished dream of Dr. Henry Boswell came true three years ago, when the beautiful and spacious Preventorium was thrown open to the children of Mississippi. No better site in the entire south could have been selected,—on an elevation assuring drainage and water second to none in the unlimited supply. Shade and sunshine are there in plenty, and it is under the direct supervision of Dr. Boswell himself, being located on the grounds of

the State Sanatorium. The state legislature had provided the building and general equipment, but those in charge soon realized that there were other needs not included in this fund, such as replacement of broken and worn out toys, books, games, equipment for special occasions, and even clothing for those unfortunate ones who when time to go home came, had "nothing to wear." So the question arose. Who would undertake the collecting of this fund? The Woman's Auxiliary to the Mississippi State Medical Association was in the field for anything constructive and lasting, so why not this project? At the next meeting following the opening of the Preventorium the Auxiliary voted to take over this work, and Mrs. Dan J. Williams was appointed state chairman of the Preventorium Fund.

Each year following a letter has been mailed to every Federated Club in Mississippi telling them of this need and asking for a small donation. By this means not only have we been able to keep the children supplied but have kept the splendid work of the institution before the eyes of more than 250 clubs. Over \$500 has been collected by this small effort, and we feel that money could not pay for the results obtained therewith. This will probably be an Auxiliary pet for many years to come, or until the state can supply all necessary material without other assistance. Had not so many banks hit the bottom, carrying so many individuals with them, we feel sure we would have doubled our fund, but the good will and letters from clubs all over the State are indeed appreciated by the chairman, her co-worker, Mrs. Henry Boswell, and the membership as a whole.

Mrs. Dan J. Williams,
Chairman, Preventorium Fund.

Gulfport,
February 28, 1933.

AUXILIARY TO THE DELTA MEDICAL SOCIETY

The Washington County Unit of the Women's Auxiliary to the Delta Medical Society met on Wednesday, March 1, at the King's Daughters' Hospital to formulate plans for the meeting of the Delta Auxiliary to be held in Greenville on April 12. The Washington County Unit as hostess to the visiting units of the Auxiliary is planning a number of activities.

The Women's Auxiliary to the Delta Medical Society will meet in Greenville, on April 12, at the Methodist Church, 2:30 P. M., the president, Mrs. John A. Beals of Greenville, presiding. The state president, Mrs. W. C. Pool, will be a guest and speaker of the day. The Constitution and By-Laws for the Delta Auxiliary will be presented for adoption by Mrs. T. B. Holloman of Itta Bena. All

wives of physicians as well as members of the Auxiliary are urged to attend the meeting.

The Washington County Unit of the Auxiliary to the Delta Medical Society, as hostess to the visiting units, has many plans for the pleasure and entertainment of the visiting ladies. A bridge supper will be tendered at the American Legion Club while the physicians and husbands hold their banquet at the Country Club. For all not caring to play bridge other amusements and entertainment are planned. The old fashioned manner of getting acquainted by conversation as to the number and accomplishments of our children, etc., may be enjoyed by any who do not especially wish to enter into the games. All visiting wives, whether members of the Auxiliary or not, are cordially urged to come to Greenville. We will do our best to make them feel they want to be members of our Auxiliary.

The Women's Auxiliary to the Delta Medical Society reports 46 members and three units already organized. All units have held at least two regular meetings with good attendance and growing interest. These units are Washington, Leflore and Sunflower. The vice-president for Humphreys County reports that they are not as yet decided as to having a unit or coming into the Delta Auxiliary as members at large for there are but seven eligibles in Humphreys. As small units sometimes accomplish more than large ones we hope they go forward to a unit. Bolivar County is as yet unorganized.

The officers of the Women's Auxiliary to the Delta Medical Society are as follows: President, Mrs. John A. Beals, Greenville; Vice-President, Leflore County; Mrs. J. C. Adams, Greenwood; Vice-President, Sunflower County, Mrs. S. N. Newell, Inverness; Vice-President, Bolivar County, Mrs. W. M. Merritt, Boyle; Secretary and Treasurer, Mrs. J. C. Pegues, Greenville; Parliamentarian, Mrs. T. B. Holloman, Itta Bena.

Dr. R. E. Wilson read a paper before the Central School Parent Teachers Association at Greenville in January. Dr. G. W. Eubanks read one before the Court School Parent Teachers Association in February. These papers were arranged for through the president of Washington County Unit and these doctors were appointed by the advisor to the unit, Dr. Otis Beck. Large and appreciative audiences attended these meetings and pronounced these programs the best of the year.

We are putting forth a great effort to organize a branch of the Auxiliary in each county and are glad to report the following:

Washington County. Organized Nov. 16. Members to date 24.

Leflore County. Organized Jan. 13. Members to date 10.

Sunflower County. Organized Jan. 31. Members to date 7.

We have notified the P. T. A. that a physician speaker is available for each meeting. The local medical society co-operates with us in this movement. We feel that the short talks given by the physician himself are greatly appreciated and they are most instructive.

We are all looking forward to our semi-annual meeting in Greenville, April 12, when we hope to have a good report from each county.

Mrs. J. A. Beals,
President.

Greenville,
February 22, 1933.

LEFLORE COUNTY AUXILIARY

I am sending to you a copy of the meeting of the Leflore County Unit of the Woman's Auxiliary to the Delta Medical Society. This copy is the same as was published in "The Daily Commonwealth."

"The Leflore County unit of the Women's Auxiliary to the Delta Medical Society was organized at the home of Mrs. L. B. Otken, Friday, the 13th.

"The Vice-President, Mrs. J. C. Adams, opened the meeting with the reading of the by-laws of the Delta Auxiliary, after which Mrs. T. B. Halloman of Itta Bena, was appointed to draft corresponding by-laws for the Leflore County unit.

"Following a round table discussion, the unit voted to have one meeting each month, this meeting to be held on the first Friday of each month, at 11:45 A. M., with a luncheon first and the business afterward. It was also voted that the dues for the year would be seventy-five cents.

"Mrs. L. B. Otken was elected treasurer and Mrs. John A. Crawford secretary. The following committee chairman were appointed by the vice-president: Entertainment and Ways and Means, Mrs. F. M. Sandifer; Membership and Hygeia, Mrs. W. E. Denman. Other committees will be appointed at the February meeting.

"After the business, Mrs. Otken and Mrs. Adams served a delicious salad course to the following members: Mrs. F. M. Sandifer, Mrs. W. E. Denman, Mrs. W. G. Tabb, Mrs. T. B. Holloman, Mrs. L. E. Ferguson, Mrs. J. P. Bates, and Mrs. J. A. Crawford."

Mrs. John A. Crawford,
Secretary.

Greenwood,
February 22, 1933.

AUXILIARY TO THE ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY

Mrs. Sydney Johnston, Mrs. I. C. Knox, Mrs. H. H. Haralson, Mrs. D. A. Pettit, Mrs. Preston Her-ring, Mrs. A. Street, Mrs. George Street, Mrs. E. F. Howard, Mrs. Lawrence Clark, and guests, Mrs. J. R. Clark of Clinton and Mrs. J. C. Edwards of Pontotoc, Mrs. W. C. Pool of Cary and Mrs. Guy

Jarratt, Dr. H. F. Hartzell, Miss Frances Mackey and Mrs. M. D. Landau were present for the February meeting of the Auxiliary to the Issaquena-Sharkey-Warren Counties Medical Society held in the Coral Room of the Hotel Vicksburg.

A lovely luncheon was served and the delightful social period was thoroughly enjoyed.

The president, Mrs. Sydney Johnston, called on Mrs. Landau who then introduced Dr. H. F. Hartzell, National Representative of the Red Cross, who is conducting a first aid class here. His instructive talk on "Safety" was most interesting.

After a short business session the program followed. Mrs. John Birchett gave an excellent talk on "The Heroine of Surgery—Jane Todd Crawford." The subject proved to be one of great interest to all. The members feel deeply grateful to Mrs. Birchett for information so enlightening and inspiring.

The Auxiliary adjourned with the members eagerly anticipating the March meeting.

Mrs. A. Street has returned from a pleasant visit spent in New Orleans.

Mrs. D. A. Pettit successfully sponsored a carnival at Speed Street School. Her duties as president of the Parent Teachers Association of that school keep her busy.

The attendance at the February meeting of the Auxiliary was smaller than usual due to illness in the homes of various members.

Mrs. L. J. Clark,
Press and Publicity Chairman.

Vicksburg,
March 1, 1933.

AUXILIARY TO THE HOMOCITTO VALLEY MEDICAL SOCIETY

Sorry to report that we have nothing of interest to turn in this month. However, we are making extensive plans for our joint meeting next month with the members of the Homochitto Valley Medical Society.

Natchez,
March 8, 1933.

AUXILIARY TO THE CENTRAL MEDICAL SOCIETY

The regular meeting of the Woman's Auxiliary to the Central Medical Society was not held on Tuesday, March 7, as scheduled. The date for the meeting will be announced later.

Dr. and Mrs. Lawrence Long recently enjoyed a brief visit from Dr. Long's mother, Mrs. L. C. Long of Satartia.

Mrs. J. W. Barksdale is recuperating from a tonsil operation performed at the Jackson Infirmary recently. Her daughter, Mrs. Guy Humphrey of Greenwood, was with her.

HONOR ROLL

The following have contributed to the present number of THE JOURNAL:

COUNTY EDITORS: C. W. Patterson; L. L. Minor; C. C. Buchanon; T. J. Brown; William F. Hand; S. B. McIlwain; L. L. Polk; W. B. Dickins; G. S. Bryan; R. P. Donaldson; R. B. Cunningham; Eric A. McVey; W. C. Pool; E. L. Walker; J. W. Moody; C. M. Murry; Nathan B. Lewis; John G. Archer M. L. Montgomery.—19.

MEDICAL SOCIETIES: Second Councilor District, L. L. Minor; Central Medical Society, Robin Harris; Coahoma County Medical Club, V. B. Harrison; Delta Medical Society, John G. Archer; East Mississippi Medical Society, T. L. Bennett; Harrison-Stone-Hancock Counties Medical Society, E. A. Trudeau; Issaquena-Sharkey-Warren Counties Med-

ical Society; Northeast Mississippi Thirteen Counties Medical Society, J. M. Acker, Jr.; South Mississippi Medical Society, J. P. Culpepper, Jr.; Tri-County Medical Society, H. R. Fairfax.—10.

HOSPITALS: King's Daughters' Hospital, Greenville, J. A. Beals; Mississippi Baptist Hospital, Jackson, Lawrence Long; Northeast Mississippi Hospital, Booneville, R. B. Cunningham; Vicksburg Sanitarium, 4.

WOMEN'S AUXILIARY: Mrs. Leon S. Lippincott; Mrs. W. C. Pool; Mrs. Dan J. Williams; Mrs. J. A. Beals; Mrs. John A. Crawford; Mrs. L. J. Clark; Mrs. H. M. Smith.—7.

OTHERS: T. M. Dye; D. W. Jones; H. O. Pate; E. F. Howard.—4.

GRAND TOTAL.—44.

YOUR EDITORS THANK YOU.

BOOK REVIEWS

Office Surgery: By Fenwick Beekman, M. D. Philadelphia and London, J. P. Lippincott Company, 1932. pp. 402. Price, \$5.00.

J. P. Lippincott and Company have published in the last few years a valuable series of monographs on various medical and surgical subjects, the most notable of which, perhaps, is the authoritative treatise on burns by Pack and Davis. Because these books are so excellent it is regrettable that the present text on *Office Surgery* has been added to the list; it does not augment the reputation of either the author or the publishers.

In the first place, the definition of the word monograph and the subject of this particular book are a contradiction in terms. A monograph is a more or less lengthy essay on a single subject, whereas office surgery, as experienced and inexperienced surgeons alike know, is a multiple subject, an all-inclusive subject. The author himself grants that in his preface: "The practitioner in his office may be brought into contact at any moment with a patient who may be suffering from almost any one of the many surgical conditions," he says, and since this is so, he goes on to add that "a book of this kind should contain a complete dissertation on surgical diagnosis and an outline of treatment." These are the author's own specifications, and obviously they cannot be met in a text of 402 pages, including the index.

But to go further. The reviewers are of the opinion, and the author shares it with them, that there is, in the final analysis, no such thing as office surgery if one means by the phrase the type of surgery that can properly be handled within an office. Surgery cannot be divided into watertight compartments. It is hard to conceive of any disease that may not at some time or other make its way into a surgeons' office, at least for diagnosis, and it is equally impossible to conceive of any con-

dition which falls under the indefinite heading of minor surgery that may not at some time, indeed at many times, require hospital treatment. Furthermore, what can and what cannot be done in an office varies with the equipment of the individual office, with its personnel, and, first of all and above all, with the desires and the training and the personality of the surgeon himself. Again the author condemns himself out of his own mouth: "The more one practises surgery," he says, "the fewer cases he wishes to treat surgically—in his office." And again he writes, very correctly indeed, "In the writers' opinion there is no such thing as minor surgery, for any surgical lesion, be it ever so insignificant, may be the first sign of a serious condition or may develop complications which will tax the ingenuity and judgment of the best of us. Consequently, there is no lesser surgery. All surgery is the same. There is no minor or major, as the simplest case at the onset may become the most complicated." He is, as we say, quite correct, and the surest way of establishing his position is to consider the various "minor surgeries" which have been written, and their ultimate fate; any minor surgery inevitably outgrows itself, and with each new edition it becomes more and more a textbook of general surgical diagnosis and treatment.

The alternative is a book of this sort, which is little more than a superficial and incomplete account of a number of unrelated diseases and conditions, many of them belonging in an office only for diagnosis, some of them unlikely, in these modern days, to find their way into an office at all, even in the most rural of communities. In justice to the author it should be said that he states, in season and out, that the majority of the conditions he is discussing belong in the hospital and not in the office, but the question inevitably arises, then why consider them at all under

the heading of office surgery? And from that question arises another, will not a book of this sort, at least in certain hands, do actual damage, in that it may encourage the treatment of disease in the office rather than in the hospital? We have in mind the treatment of carcinoma of the breast as well illustrating this point. It is quite true that the unequivocal statement is made that immediate exploration of any breast tumor is essential, and that the radical removal of the breast for malignant disease is the only treatment to be considered, but the emphasis is faulty and the implications distinctly misleading.

The mention of the breast suggests another criticism. The reviewers are aware that the classification of "caked breast" is used in the best surgical circles, but it is their opinion, and they are not alone in it, that the term is a misnomer and the classification erroneous; a caked breast is a breast in which there is some degree of mastitis. In other words, this is an infectious process fundamentally, not merely a mechanical one, and the treatment of the condition would be vastly bettered were that distinction generally comprehended. We doubt also where such a thing as "pyogenic granuloma of the finger tips" really exists. In our opinion such a condition is always the evidence of an untreated felon, and the treatment is simply the removal of the necrotic bone. We doubt also, that tuberculosis or syphilis of the finger tips should be classified as clinical entities; the subject of infections of the hand is complicated enough in itself without the introduction of new and unnecessary difficulties.

These, however, are minor criticisms, for the text, on the whole, deals quite satisfactorily, from the point of view of diagnosis and treatment, with such subjects as it handles. It is good enough as far as it goes; it simply does not go far enough. In short, it is just another book, and one regrets that the author has spent his experience and ability, for which there can be only praise, on a text which gives him so little scope for his talents.

FREDERICK FITZHERBERT BOYCE, M. D.

JAMES DAVIDSON RIVES, M. D.

General Medicine 1932: Edited by George H. Weaver, M. D. and others. Chicago, The Year Book Publishers, Inc., 1932. pp. 837. Price, \$3.00.

The forever-worthy annual of the years' literature keeps pace with former editions. The editorial board is the same as in 1931.

It is difficult to be specific in discussing such a volume. The very recent concepts of intravenous vaccine therapy in chronic arthritis; artificial pneumothorax in lobar pneumonia and myocardiosis are but a few of the covered topics of current interest.

Regardless of his specialty, every practitioner of medicine would find this volume of benefit.

SIDNEY M. COPLAND, M. D.

Textbook of Surgery: By John Homans, M. D. Rev. and enl. ed. Springfield, Ill. Chas C. Thomas, 1932. pp. 1231. Price, \$8.00.

That ingenuity and originality even in a text book are prime factors is well demonstrated in this volume.

The aim of this book, as the author states, is to "record and amplify lectures now given by members of the surgical department of the Harvard Medical School." Throughout the broad scope of this book, there is imposed, as upon a single volume, the many personal touches combined with the finesse of detail and wealth of personal experiences in so many specially developed subjects. This not only enhances its educative value but also makes it interesting, easy and pleasant to read.

The many line drawings (sketches from life, from pathological specimens and from photographs) are excellent, showing rare skill both in choice and in lucidity.

This excellent text should no doubt prove invaluable not only for students but also for the surgeon.

PAUL G. LACROIX, M. D.

The Use of Lipiodol in Diagnosis and Treatment:

By J. A. Sicard, and J. Forestier, London. Oxford University Press, 1932. Pp. 231. Price, \$4.00.

Lipiodol is a compound of iodine and poppy seed oil. The substance is obtained by utilizing the ability of an unsaturated fat to fix iodine to its molecules. It is very stable, bland and non-poisonous. Because of its high iodine content (40 per cent by weight) it is opaque to the roentgen ray and therefore particularly applicable for radiographic examination. It has been most successfully employed by these authors to the central nervous system and the respiratory tract. However, its usefulness has likewise been demonstrated in both the male and female generative tracts, the urinary tract, the blood vessels, the nasal sinuses, the lacrymal ducts, the bones and joints, the serous cavities, the peripheral nerves and in the estimation of the secretory activity of the stomach. The field of lipiodol therapy is rapidly growing. It is used as an epidural injection for lumbar and lumbosacral pains, it is applied to the laminae, around nerve trunks, to osteopereosteal surfaces, into joints and around joints. In various forms of algia lipiodol affords marked relief in many cases. It is useful in the treatment of arthritis, enuresis (with spinal bifida) and particularly is it valuable

in the treatment of bronchiectasis and supurating broncho-pulmonary cavities.

MAURICE, SULLIVAN, M. D.

Recent Advances in Anesthesia and Analgesia:

By C. Langton Hewer, M. B., B. S., London,
P. Blakiston's Son and Company, 1932. pp. 187.

This is a small book, in which the author keeps almost entirely within the scope of his title, although the "anoci association" theory can hardly be considered recent, cocaine is certainly not recent, the use of suction in oral surgery is not recent in this country and percaine (Nupercaine), while recent enough, will probably not prove to be much of an advance.

The chapters on synergism, basal narcotics and agents for general anesthesia are very complete. The chapter on "gas" anesthetics includes descriptions of the most modern apparatus for their administration. If there is any criticism to be made of this section of the book, it is that while ethylene is apparently described as superior to nitrous oxide, it is almost never given preference for any specific purpose. The discussion of explosive hazards is a little vague, but is redeemed by the statement that "The precautions necessary to avoid disaster must be considered separately for each individual case."

The section of the book devoted to local and regional anesthesia is brief and confined largely to spinal anesthesia. The author's marked enthusiasm for percaine (Nupercaine) is not shared by all others who have used it.

The book is concise and complete and generally impartial. It furnishes an opportunity for one to become acquainted with the newer methods in anesthesia and analgesia with a minimal expense of time.

WILMER BAKER, M. D.

Syllabus of Medical History: By Victor Robinson.
New York, Froben Press, 1933. Illus. pp. 110.

A most enjoyable brief volume. It contains a most entertaining example of medical chronology and the medical essay. The value of the photostat in medicine, with numerous questions and answers on the highlights of medicine are particularly notable. It is well worth the reading.

I. L. Robbins, M. D.

Chapters in American Obstetrics: By Herbert Thomas, M. D. Springfield, Ill. Chas. C. Thomas, 1933. Por. pp. 90.

This little book is a collection of biographical essays dealing with the lives of various physicians who have made notable contributions to the development of American obstetrics. It is a most interesting volume, and deserves commendation for the manner in which the material is presented.

It is well to bear in mind that modern medicine is a product of the labors of our fore-fathers, and it is fitting that we should study their lives so as to be familiar with their problems and difficulties, and to give them due credit for the parts they have played in the advancement of medical science. This work does this admirably in the particular field of obstetrics.

E. L. KING, M. D.

The Sex Technique in Marriage: By Isabel Emslie Hutton, M. D., New York, Emerson Books, Inc. 1932. pp. 160.

The sex question, so secretively guarded by unwarranted prejudiced ideas, is being brought to light by courageous men and women, who realize that ignorance, a cause of many evils must be overcome by enlightenment, which will make many men and women happier and healthier. Dr. Hutton's *Sex Technique in Marriage*, written in a language that could be understood by any fairly intelligent individual, should be read and interpreted as an expression of one who sincerely and earnestly endeavors to aid in the prevention of family dissolution. It merits the close perusal of all men and women of marriageable age.

ADOLPH JACOBS, M. D.

Psychology and Psychiatry in Pediatrics: The Problem: Report of the Sub Committee on Psychology and Psychiatry, of the White House Conference Child Health and Protection. New York. The Century Co. 1932. pp. 146. Price \$1.50.

Taking the second article of the Children's Charter, "For every child understanding and the guarding of his personality as his most precious right", the subcommittee on psychology and psychiatry presents its report; "Psychology and Psychiatry in Pediatrics: The Problem", is one of a series of books sponsored by the White House Conference on Child Health and Protection.

The report concerns itself with the question, should the medical practitioner give advice when difficulties appear to threaten the satisfactory development of a child under care.

The introduction deals with a definition of psychology and psychiatry, but does not enter the field of general discussion. "The investigation has been confined to those aspects of the subject which directly interest physicians in charge of medical care of children". A list of schools of medicine and the hours required in psychology and psychiatry is included as well as an outline of present procedure in organized clinics for children.

In its conclusions the Subcommittee states that its members are prepared to defend the statement that adequate medical care of the child can not be given without intelligent attention to any intel-

lectual or emotional difficulties which may be present. The subcommittee feels that the fields of psychology and psychiatry are broad and rather ill defined, and they do not urge doctors in general to become experts in these subjects.

The discussions of a number of specialists are abstracted in the latter half of the volume. The appendix gives a detailed account of methods of obtaining information, as well as detailed matter on child guidance and juvenile clinics. The report is concise and informative.

MAUD LOEBER, M. D.

Body Mechanics: Education and Practice: Report of the Sub-committee on Orthopedics and Body Mechanics of the White House Conference on Child Health and Protection. New York. The Century Co. 1932. pp. 166. Price \$1.50.

Body Mechanics: Education and Practice, one of the publications of the White House Conference on Child Health and Protection, seeks to define body mechanics as the medical correlation of the various systems of the body with special reference to the skeletal, muscular and visceral systems.

The sub-committee on Orthopedics and Body Mechanics has attempted to conform to the three main purposes of the Committee on Medical Care for Children. The purposes are:

To determine what is already being done.

How completely the demands for this type of medical care are at present satisfied.

What ought to be done.

It is the recommendation of the sub-committee that the term *body mechanics* be employed wherever possible in place of *posture*. They feel the first is more inclusive and descriptive.

The report gives details of what is being taught in regard to body mechanics in medical schools, schools of physical education, public, parochial and private schools, hospitals and health centers and in the homes of children. They have endeavored to determine how much a medical student should be taught of body mechanics and in what department this teaching should be done.

The report goes rather lengthily into a definition of terms, and includes posture standards of various types for boys and girls. The committee includes recommendations of what teaching should be given. Three abstracts of the discussion are included. The appendix includes: posture and physical fitness; courses in physical education and a copy of the questionnaire sent to professors of orthopedic surgery in 60 schools.

MAUD LOEBER, M. D.

Growth and Development of the Child; part 3—Nutrition: Report of the Committee on Growth and Development of the White House Conference on Child Health and Protection. New

York. The Century Co. 1932. pp. 532. Price, \$4.00

"The main objective of the Committee on Growth and Development has been to appraise the existing knowledge descriptive of the growth and development of children from conceptive to maturity".

The two terms growth and development are used advisedly as there is a useful and significant distinction between them. By growth we mean increase in size. As opposed to this, development implies an increase in complexity, such as we see in the formation of the four chambered heart of the infant from the simple pulsating tube of the embryo. It is possible in many instances to have considerable development with very little growth in size.

On the other hand, in the field of mental development it is impossible to make any clear distinctions between growth and development. We may say that the mind grows, but we can just as well say that the mind develops. In practice the terms are used quite interchangeably.

The study covers a wide field and tremendous funds of information, both in America and Abroad are correlated—not only as regards diet in all its phases but details of the chemistry of the body, food supplies and national food habits of children.

The subcommittee on growth and development has gathered together a great quantity of late and authoritative information on foods and feeding and their relation to the growth and development of the child. Excellent tables are included, and the references are well arranged and will be found valuable.

MAUD LOEBER, M. D.

The Genius of Louis Pasteur: By Piers Compton. New York. The MacMillan Company. 1932. pp. 361. Por. Price ———.

The volume, *The Genius of Louis Pasteur*, is more than a sketch of his life and work and less than a biography, it is an interpretation of the guiding principles of the greatest human benefactor of mankind.

In a letter written by Pasteur, at the age of 18 years, he said, "Will, work, success fill human existence. Will opens the door to success both brilliant and happy; work passes these doors and at the end of the journey success comes to crown one's efforts."

This excerpt from Pasteur's letter is a true summary of his after life.

His will to do, against the odds of popular scientific belief and physical infirmities, and his intense devotion to duty with his capacity to work that he might ultimately benefit his fellows certainly opened the doors that he might be crowned the master scientist and benefactor of the race.

Compton seeks to show through the life of Pasteur the fundamental error of taking for granted that there must exist an essential conflict between science and religion.

As witness of Pasteur's truly religious attitude the author quotes from a letter written by Pasteur to his father—"God grant that by my persevering labours I may bring a little stone to the frail and ill-assured edifice of our knowledge of those deep mysteries of Life and Death where all our intellects have so lamentably failed."

In another place he quotes Pasteur's statement with reference to own life in which he says "Science brings man nearer to God."

Many of our half baked, so-called scientists might do well to heed his example for he says: "Researches on primary causes are not in the domain of science, which only recognizes the facts and phenomena which it can demonstrate."

The volume presents an entirely different point of view from many of those which have been written. It is a worthy effort from a facile pen. An intimate picture is drawn, not of the physical man alone, but of the driving motives.

To both scientists and religionists this volume is commended. It offers points of contact which must be gratifying to both.

ISIDORE COHN, M. D.

PUBLICATIONS RECEIVED

W. B. Saunders Company, Philadelphia: *The Principles and Practice of Obstetrics*, by Joseph B. DeLee, A. M., M. D. *Neuropathology*, by Walter Freeman, M. D. Ph. D.

J. B. Lippincott Company, Philadelphia: *International Clinics*, by Louis Hamman, M. D. *Diseases of the Heart*, by Sir Thomas Lewis. *Clinical Diagnosis*, by Newton S. Stern, M. D.

Paul B. Hoeber, New York: *The Duodenum*, by Edward L. Kellogg, M. D., F. A. C. S.

Charles C. Thomas, Springfield: *Endocrine Medicine*, by William Engelbach, M. D., F. A. C. P., M. S.

The Macmillan Company, New York: *The Medical Secretary*, by Minnie Genevieve Morse.

William Wood and Company, Baltimore: *Chronic Arthritis and Fibrositis, Diagnosis and Treatment*, by Bernard Langdon Wyatt, M. D.

New York Tuberculosis and Health Association, New York: *Criteria for the Classification and Diagnosis of Heart Disease*, by J. H. Bainton, M. D., R. L. Levy, M. D., A. C. DeGraff, M. D., H. E. Pardee, M. C.

American Birth Control League, published by the Williams and Wilkins Company, Baltimore: *The Technique of Contraception*, by Eric M. Matzner, M. D.

United States Government Printing Office, Washington: *Sixth International Congress of Military Medicine and Pharmacy and Meetings of the Permanent Committee*, report of Commander William Seaman, Bainbridge, M. C. F., U. S. N. R.



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A REVIEW OF NINETY-SIX CASES OF ABSCCESS OF THE LIVER*

HERMANN B. GESSNER. M. D.

NEW ORLEANS

It is now well known that the term abscess of the liver no longer necessarily suggests the tropics, with their banana shrubs and coconut palms. Boland¹ has reported cases occurring in Atlanta, several hundred miles from the Gulf of Mexico. Lear and Merrill² have described an outbreak of amebic disease and abscess of liver in Connecticut. Sistrunk³, in a paper giving the results of a large number of stool examinations made in the Rochester clinic, has shown the wide incidence in this country of protozoal infestation. It is planned in this paper, to review about a hundred cases of abscess of the liver recorded in the New Orleans Charity Hospital between the years 1918 and 1932. While the determination of the mortality rate was the principal incentive to bring about this study, other phases of the question have been considered. Subphrenic infections are not included.

The cases reviewed comprise the serial numbers 244-350, including some duplicate numbers, a total of 110 histories; of these fourteen were eliminated, twelve because the diagnosis was inadequately established, two because of duplication; there remain ninety-six cases verified. It is interesting to note that one of the cases eliminated (serial number 349) was found at autopsy to be one of rectal carcinoma with a large metastatic growth in the liver.

Of these ninety-six patients fifty-eight were

discharged; thirty-eight died, a mortality of 39.58 per cent. The nineteen cases reported by Boland as a whole, had a mortality rate about the same, 42 per cent. Herrick's forty-seven cases in the Canal Zone⁴ showed eleven deaths, a low mortality rate of 23.4 per cent.

Comparison on the basis of parasites found was made. Counting as amebic the cases in which smear and culture were negative—47—with those in which the pus—2—or the feces—7—showed amebas, a total of fifty-six cases was arrived at with nineteen deaths, a mortality rate of 33.9 per cent, about the same as that of Boland's fourteen amebic cases with 35.7 per cent; the cases showing staphylococcus, streptococcus or *Bacillus coli* infection gave a mortality of 37.9, as against Boland's 60 per cent, due to three cases of multiple abscess, necessarily fatal. Herrick's forty-seven cases, with 23.4 per cent mortality, reported in 1910, were probably all amebic.

Cases noted as having large abscesses showed twenty-six recoveries and fourteen deaths, a mortality of 35 per cent, a little below the general eral rate of 39.58 per cent.

In an endeavor to find comfort somehow and somewhere in the face of this heavy mortality rate, the ninety-six cases were divided into two equal halves, serial numbers 244-296, from 1918 to 1925 inclusive, 299-350 from 1926 to 1931 inclusive. It was hoped that the proportion of fatal cases would be found less in the latter half because of better diagnostic means including roentgenograms of the thorax with tell-tale elevation of the right leaf of the diaphragm in liver pathology. The result of this comparison was that the first forty-eight showed a mortality of 35.4 per cent, the second group 43.7 per cent.

*Read before the Orleans Parish Medical Society, October 11, 1932.

Some little comfort was derived from the comparative mortality in whites and blacks, the former showing a 30.1 per cent rate, the latter 51.1 per cent, probably as a result of greater delay in seeking treatment.

In this connection the comparative incidence in whites and blacks was studied. In our series of ninety-six cases 55.2 per cent were whites, 44.8 per cent blacks. The Hospital admissions for the years 1919-1931, inclusive, were 195,840 whites, 154,206 blacks, in the proportion of 55.9 per cent whites, 44.1 blacks, about the same as the proportion in our ninety-six cases, showing no greater incidence in either race.

Examining other phases of the records, it was found that two cases gave a history of trauma; thirty-three out of ninety-six gave a history of diarrhea of importance, recent or old. Six were jaundiced on admission.

It is of interest to note that in forty-seven cases (72 per cent) the roentgenogram showed a high right leaf of the diaphragm, while in eighteen cases (28 per cent) this diagnostic aid was absent. In sixty cases (80 per cent) there was a definite leukocytosis; in fifteen, (20 per cent) no leukocytosis.

One patient reported ten years spent in the tropics; two were steamship firemen, one of whom reported a stay in the tropics, while another very likely had been similarly exposed. Aside from these cases, occupation and residence had no perceptible influence.

Three were recurrent cases, a previous operation having shown abscess of the liver.

The relative proportion of male and female patients was such as to attract attention, being 92.8 per cent males, 7.2 per cent females. Doctor C. C. Bass of New Orleans, in an oral communication, informs me that in a large number of stool examinations for amebas he has rarely found this parasite in female patients. It is suggested that the occupations of women, which confine them more to the home and its safer food and drink, protect them from the dangers incurred by men who do more eating and drinking away from home, besides indulging in injurious habits not as yet widely cultivated by the opposite sex. Alcohol may be a factor of importance.

Investigating the thoracic complications, to

which attention was drawn by Thompson⁵, three cases were found recorded as showing involvement of the right pleural cavity, one with broncho-hepatic fistula; a fifth came in with hemoptysis. Of these five, four died, a mortality of 80 per cent.

The thirty-eight fatal cases yielded twelve autopsies. In five cases multiple abscesses were found. In two cases free blood was found in the abdomen (200 c.c. and 1,500 c.c. respectively); in three there was pneumonia, and in two there was nothing noteworthy besides the single abscess. In one of three pneumonia cases there was rupture into the pleural cavity; in another pneumonia case there was perforation into the colon. No case presented cerebral or splenic abscess.

The details of one of the multiple abscess cases may be of interest. This was a boy of fourteen (serial No. 299), who was operated on by me on December 3, 1925; under ethylene anesthesia an acutely inflamed appendix was removed; there was a considerable amount of clear fluid in the cavity; closure without drainage.

After operation the temperature rose, the liver became large; aspiration brought pus which showed streptococci in smear and culture. There were no chills. On December 8, five days after the appendectomy, an abscess of the liver was drained after rib resection and packed with gauze; on January 7, another abscess was opened through the midline under local anesthesia; death on January 8. Autopsy showed an abscess at the site of the appendectomy, multiple metastatic abscesses of liver and kidneys.

Methods of treatment were compared. The most common was incision of the abscess, after making sure of adhesions, and packing the cavity tight with iodoform gauze soaked in balsam of Peru and castor oil. This method in New Orleans is attributed to Doctor Rudolph Matas. Twenty-three cases were recorded as treated by this method, with a mortality of five, or 17.8 per cent. The next most popular method was incision and drainage with tubes only; this was applied in seventeen cases with five deaths, 29.4 per cent. Cases drained by a combination of tubes and gauze packing were eliminated. Other methods employed were: (a) closed drainage with trocar and tube, (b) the

Nather-Ochsner⁶ technic of posterior approach, and (c) aspiration followed by injection of anayodin. The cases treated by these methods were too few to permit of satisfactory comparison from the mortality viewpoint.

COMMENT

The importance of the liver in bodily functions, its relation to abdomen and chest, make hepatic abscess a disease of prime importance. The mortality rate in all hands is heavy. What can be done about it? First of all must come prevention and cure of the infections preceeding it. Preventive medicine must ward off infestation of the human bowel with *Amoeba histolytica*. Diarrheas of any duration must be investigated and given proper treatment. The barium enema is a recent addition to the diagnostic technic, showing small ulcerated areas. Inflamed appendices must be removed promptly to anticipate pylephlebitis. As surgeons we are interested in early diagnosis and effective treatment. Diagnosis is based on enlarged and tender liver, usually attended with fever and leukocytosis; there may be chills, jaundice, pain in the shoulder, a history of antecedent diarrhea or dysentery. Roentgenograms show an elevated right leaf of the diaphragm, with the angles clear. Considerable difference of opinion exists as to exploratory puncture. Thompson⁵, Lear and Merrill², Wilmoth⁷ recommend the systematic exploration of the liver with needles reaching a depth up to four inches. Wilmoth supplements the use of the needle with shadow-casting media to show the exact location and extent of the abscess. On the other hand Herrick⁴, with a considerable experience in the Canal Zone, describes localization by the needle as unreliable, speaks of fatalities reported from its use, and recommends laparotomy in all cases where doubt exists as to the location of the abscess and in all cases where the symptom complex is not explained by disease elsewhere. It would seem that here as elsewhere, the truth lies between the extremes. When suspicion points to easily accessible regions like the epigastrium or the right infracostal region, it is easy and safe to explore with a needle; where the needle fails in the face of strong suspicion a laparotomy will be helpful. We are warned against the danger of hemorrhage from puncture of an acutely inflamed and

excessively hyperemic liver. If the region suspected is high and posterior the Nather-Ochsner method of exploration by resection of the right twelfth rib and approach between the diaphragm and the peritoneum offers a practical and satisfactory technic.

Relative to treatment also, there is room for difference of opinion. While incision and a tight pack to distend every little pocket gave the best results in our series, I am deeply impressed by the figures for amebic abscess given by the British Army surgeon in India, Sir Leonard Rogers⁸. He reports 2,661 cases treated by open operation between 1893 and 1907, with 1,311 deaths, 56.7 per cent mortality. After the change from open operation to aspiration, followed at the beginning of the series by washing out with 1/500 quinine sulphate solution and later by emetine hypodermatically without irrigation, 111 cases gave sixteen deaths, 14.4 per cent mortality. A pupil of Rogers Doctor K. K. Chattrji, is quoted⁹ by him as reporting 186 liver abscesses treated by aspiration and emetine, combined with irrigation of the cavity through the aspirating needle, with a remarkably low mortality of 1.6 per cent. Rogers states that 86 per cent of abscesses were sterile when opened; operation led to secondary infection as in tuberculous abscesses. The experience of Lear and Merrill in Connecticut, confirmed the value of the aspiration-emetine method.

It may well be that the best results will be obtained by careful study of the patient with reference to parasites in pus and in bowel, so as to differentiate bacillary from amebic abscess, the latter to be treated with aspiration, emetine and anayodin, with or without irrigation, the former by incision and full packing.

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DISCUSSION

Dr. Alton Ochsner: There is little left to be said about the treatment of liver abscesses after Dr. Gessner's presentation. However, there are two or three facts I would like to emphasize.

The first is that it is important to distinguish the various types of liver abscesses. As Dr. Gessner has pointed out, there is a great deal of difference in the mortality rate in amebic abscess and pyogenic abscess. It is interesting in Dr. Gessner's series of cases that the mortality rates in the two groups were about the same. This, as I see it, can only be interpreted as due to the fact that as a result of open drainage and secondary infection the mortality was increased in amebic abscess. Based upon the results of British surgeons, especially those reported by Rogers, we should in amebic abscess attempt closed drainage. Aspiration should be done and if properly performed contamination of the pleural and peritoneal cavities will not result. An amebic abscess is certainly best treated in this conservative way. A pyogenic abscess should be drained. Here also it is essential not to contaminate one of the large serous cavities. This can be accomplished by draining extraperitoneally either from in front or behind. Unfortunately, in the majority of clinics either transpleural or transperitoneal drainage is practiced too widely with the result that contamination of the pleura or peritoneum results, causing infection of a large serous cavity resulting in an overwhelming toxemia. It is therefore important to differentiate between the two types of hepatic abscess, and this is usually not difficult to do. If there is any question one can aspirate the pus extrapleurally and extraperitoneally and culture it. If micro-organisms are cultured, then open drainage should be done. If the pus is sterile, or if one feels from the clinical examination that it is an amebic abscess, conservative treatment is better.

Dr. Walet: I would like to ask Dr. Gessner in certain cases of the danger of infecting the pleural cavity or the peritoneum. I used to hear, in the days when there was more of that particular kind of work, about the advisability of operating in different stages. It was customary, in some cases, to operate in two stages to keep from getting into the pleural or peritoneal cavity. You established your adhesions then opened up your abscess.

Dr. S. K. Simon: Several aspects of the subject from the standpoint of the medical man that Dr. Gessner in his able paper touched upon, but might be further elucidated.

First, I think the fact that 96 cases of amebic hepatitis which has been reported here from Charity Hospital is somewhat of a reflection upon the diagnostic methods, not upon the part of the surgeon, but to a great extent upon the doctor in general. Sir Leonard Rogers stated in 1913 that the occurrence of amebic abscess of the liver should have been obsolete coincidental with the methods of finding *Entameba histolytica* in the stool, and the subsequent discovery of what seemed to him to be a specific remedy in emetine. Emetine was introduced in 1912 by Sir Leonard Rogers himself following the experimental work of Vedder of the U. S. Army a year previously. It is well to remember that in only one-third of the cases of amebiasis do we have intestinal phenomena. In two-thirds cases of amebiasis no outward evidence on the part of the intestinal tract appears. During the World War, the University of California men found that 12 per cent of the soldiers that were ready to embark to foreign soil harbored *Entameba histolytica* in their stools. It is pretty well established that the entire civilian population of the U. S., as well as other countries will show a 9 per cent incidence of *entameba histolytica* infection. Since this infection is rather well distributed and occurs in an average of 9 per cent of individuals, it behoves us as medical men, certainly when patients come to us, to examine the feces and intestinal tract for the presence of infection. I believe as we get to do that more in a routine manner, that the incidence of subsequent infections with ameba, such as abscesses of the liver, will disappear. Rogers goes on further to say that in the early states of what he calls amebic hepatitis before the abscess stage is reached, when the patients present themselves with large livers, and bowel signs of infection, if the stool is inspected, that the discovery of the forms in the stools and the employment of emetine will prevent the occurrence of amebic abscess of the liver. So it is with the ordinary routine measures it ought to be gradually annihilated, and I think will be in the course of the years to come.

It is well, also, to remember that emetine is more specific in amebic infections of the liver than in amebic infections of the bowel. This seems to have a more salutary effect on the liver than the bowel wall, and for that reason, I believe the disease in its early stage is amenable to medical measures. When a large abscess of the liver occurs, there is no medical treatment; then drainage must be done by the surgeon. But we as medical men universally should endeavor more and more to treat the abscess of the liver before it develops into an abscess. The real treatment is prevention.

Dr. Watson: I was glad to hear Dr. Gessner—I refer to the latter part of his paper—that the use of emetine had brought very good results, and if you noticed, the mortality record was just a little above 1 per cent. Since 1924, I have been using emetine very extensively in amebiasis. My first experience for amebic abscess of the liver with emetine was in 1924. On the first day I use one grain, one cc. of emetine intravenously every few hours until four doses are taken daily, three on the second, two on the third and one on the fourth day, making a total of ten grains in four days. The patient is kept on a limited diet because of nausea and vomiting. I then give one or two doses a week until the patient is perfectly well.

One other point. Emetine is not necessarily confined in its value to ameba. Emetine is good for any of the infections, whether it be staphylococcus, streptococcus and more especially gonococcus infections in both male and female especially gonorrheal pus tubes.

Dr. Allan Eustis: One of the most important features of abscess of the liver is its early recognition before rupture, either into the peritoneal cavity, or into the lungs, resulting in broncho-hepatic fistula. I have mentioned on several occasions a point in diagnosis that I observed for the first time in a case that I saw with Dr. Gessner in 1918 or 1919. When a liver or sub-phrenic abscess perforates the diaphragm and forms a lung abscess, bronchophony and pectoriloquy are obtained over the liver. Amebic abscesses which perforate the diaphragm, cause very little reaction in the pleura, but there is usually a hydrothorax. Often clear fluid is withdrawn from the pleural cavity and the hepato-pulmonary abscess is not suspected until rupture into a bronchus.

These cases present bronchophony over the liver so frequently that on several occasions, before roentgen-ray, we have been able to diagnose abscess of the liver pointing through the lung, from this one physical sign. If medical men as a routine will auscultate the axillary space over the liver, having the patient count 3,3,3, bronchophony and pectoriloquy over the liver will often lead to an early diagnosis of perforating liver abscess.

It is a very valuable sign, and on several occasions in my experience, the correct diagnosis has been made and confirmed by roentgen ray examination with subsequent operation upon the liver before rupture into a bronchus, thus avoiding a broncho-hepatic fistula.

Dr. Randolph Lyons: I would like to ask Dr. Gessner whether or not these patients that were operated on for amebic abscess received any amebic treatment following the operation, whether they were given any amebicidal agents following operation. I believe this is an important point. They frequently do much better following operation if

given drugs like emetine in addition to ordinary post operative measures.

Dr. H. B. Gessner: Answering the question of Dr. Walet, it is customary to attempt to close off the cavities, peritoneal and pleural, before incising the abscess. In some of these cases where closure was not effected satisfactorily packing was done and the abscess was opened subsequently, carrying out the two stage operation.

Answering Dr. Lyons, a good many patients did have amebicidal treatment afterwards. I did not investigate that phase of it. It is possible that those that got it fared better. A number got emetine or anayodin or a combination of the two.

THE PSYCHIATRIC CLINIC— ITS FUNCTION*

HENRY DASPIT, M. D.

NEW ORLEANS

Whenever a specialty in medicine or some form of therapy becomes vogue in the community, fanaticism usually runs rampant among the devotees, the laity, and among the high-priests, that particular part of the profession connected with the then existing fad. With its basic precepts of inculcation of mental health and a correct adjustment to environment one would think that psychiatry could hardly be guilty of such a pitfall. Unfortunately such is the case, for psychiatry is like most of its sister specialties. It tends now to lose its sense of proportion and to set itself aside from medicine as a whole. As it happens the specialty concerned with the preservation of mental health and the prevention of mental disorders is now of great concern in the public mind.

The generally unsatisfactory manner in which the healing art, or science, has been practiced by more or less recent and nearly all remote graduates in medicine has brought about public interest as the public is always keenly aware, though at times a bit delayed, in the appreciation of its needs. The reason for the improper rounding out of the younger general practitioner is directly the fault of our medical educational system and the psychiatrist himself in particular. The negligent psychiatrist is caught napping, awakes to find the non-medical workers intruding themselves into his sacred preserves and now

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tends to grossly overreact in defending his kingdom. He must clean house but he finds himself with but few workers as his past vision was narrowed and the breadth of his field is now called to his attention by outsiders.

The first play for a restoration of public confidence, or probably the re-establishment of veneration, has been the development of psychiatric clinics of varied forms and shapes, each with its complicated and imposing retinue and each, *horibili dictu*, rather definitely split off from other medical clinical atmosphere and procedure. One is rather forced to admit the utter impossibility of having a sufficient number of so-called psychiatrists, *per se*, to meet the mental needs of a community or sufficiently amplified psychiatric clinics, *per se*, to provide for its indigents. Indigency means poverty and poverty always means difficulties and conflicts. Hence every indigent, more than anyone else, offers a psychological problem irrespective of the real or supposed physical malady bringing him to the physician.

The psychiatric clinic as such must continue to function actively but in every other clinic the clinician must remember that the patient is more than a mechanical doll and that the very synchronization of organic and physiologic function is subservient to the mental state. Except in the grosser instances of social maladjustment, the psychiatric clinic should function exclusively as a consulting clinic to which unresponsive, apparently physical, problems could be brought by the particular clinician for analysis. When the psychological phase is discovered and outlined the patient should then be continued in the original clinic. Better medicine would be done and fewer would become those passed on from hand to hand in both clinic and private practice, misunderstood, mistreated and labelled "only psychoneurotics."

Certainly a few of such patients may remain in the psychiatric clinic but the majority would soon have their total needs met in the general clinic and ultimately by the medical advisor in private practice. Just as the psychiatrist must be keenly aware of disordered mind resulting from organic and physiologic dysfunction in the greater proportion of instances, so must all others who call themselves practitioners of medi-

cine consider the mental phase, always present, both in the immediate picture, and, only too infrequently not evaluated, in the prolongation of morbidity.

The above is but a phase of the function of a psychiatric clinic, and if accepted, rather clearly shows that the proper place for such clinic activity is most closely integrated with the general clinic. In any aspect of its function the psychiatric clinic cannot stand alone either in attempting to meet the community need or in its educational aspect, both on the laity and the medical profession, if the ultimate aim is to encourage the public to demand a practitioner of medicine who is qualified to meet their total needs except in the rare instance.

It is always difficult to cast aside the old gods, in fact it is almost professional heresy for one to assume an attitude other than that laid down by our venerated teachers of the past. For generations we have heard of the "healing art" and have taken the isolated position of healers and, like the tribal medicine man with incantations and potions attempted to root out the infesting devil. We now find out that our public is demanding that we recognize the offending devil and prevent his getting in. We cannot but accept the challenge, fully appreciating the disinclination of our public to make any sacrifice of its treasured prerogatives, call it personal liberty of thought, action, etc., and that we are called on to educate them to take the dose gracefully. It is the same old difficulty of having an individual or a group willingly cooperate in preparing for adversity in times of plenty or to think of offsetting disease when they feel the glow of health.

So the maintenance of mental health, the prevention of mental disease or mental hygiene becomes an all important aspect of psychiatric clinic activity. Here is our most difficult problem. No one takes issue when remedial measures are suggested to offset actual suffering, mental or physical, but when we attempt to curtail the injudicious, but transiently satisfying to the individual, exercise of misdirected living habits, a howl of opposition arises to high heaven. Of course, every psychiatric clinic should be a mental hygiene clinic and this includes the handling of the individual from the

germ cells, going into his genesis, until the grave. We may not get the individual in the psychiatric clinic until the preschool years, but our effort must go into that education which may assure proper parentage, for certainly both heredity and environment play a part.

It is naturally accepted that the most fertile field in the prevention of mental disease, not deficiency, is in the proper handling and guidance of the pre-school or school child with its behavior and conduct disorders. It may be remarked here that the only excuse for the existence of the child psychiatrist has been the blind disinclination of the old-line psychiatrists to give up their old gods. It may also be conceded that it takes no divine gift nor super-intelligence for one to have a reasonably good working acquaintance with mental problems. The only thing required is a healthy appreciation by the rank and file of the medical profession, and particularly those medical practitioners of infancy and childhood—the pediatricians, of the demands of the mental as well as the physical equipment. Months and years in a preventorium for the pretuberculous child but what about the prepsychotic personality? What I am leading up to is this: Just as we previously remarked that the internist or surgeon should be able to recognize and, in most cases, properly handle the psychological need of his adult patient; so should the pediatrician be able to correct behavior and conduct disorganization in children, such as tantrums, night terrors, bed-wetting, pilfering, etc., etc.

The psychiatric clinic should always be available for consultation and detailed study and advice in the mental needs of the average patient and the continued care in the more advanced cases. It should be taken advantage of by the older practitioners to supplement their lack of training in this field which forms a very definite part of their daily work.

DISCUSSION

Dr. Connely: Dr. Daspit has dealt with a subject which is very close to my heart. I thoroughly agree with him in regard to the fact that medicine and psychiatry should go hand in hand. I do not believe that any patient, whether he is psychotic, psychoneurotic, or whatnot should be handled without a thorough, careful physical examination. Working as I did for a great many years with ex-

service men, reviewing a great many examinations that came to my desk, I had very thoroughly impressed on me not only the necessity for careful physical examination but the fact of how little understanding most people have of psychic reactions. I have seen serious physical conditions come labelled "hysteria," sometimes by men who ought to have known better. Oftentimes obviously the patient had not been examined. So I believe with Dr. Daspit that psychiatry and medicine should go hand in hand.

As a matter of fact, psychotherapy was probably the first form of medical treatment. In prehistoric times, the tribal physicians were the medicine men, treating by charms and incantations. The Babylonians, 2000 years before Christ, practised psychotherapy. The ancient Greeks and Egyptians practised it, and to-day I do not think there is a single successful medical man practising medicine who does not use it, knowingly or unknowingly.

Suggestion is something that we all react to every day of our lives, thousands of times probably, and it always plays a part in the treatment of patients. The great difficulty apparently is that many people, laymen and physicians included, are not willing to acknowledge the fact of psychic conditions, but try to prove them physical, feeling in some way that a stigma goes with functional diseases. I believe that a great necessity in handling patients is to face the facts and to realize and make the patient realize that psychic conditions can be, and are, just as real to the patient as physical conditions. When we do this, we will be able to treat the psychoneurotic with a great deal more sympathy, and probably, with a great deal more success.

It is quite true, as Dr. Daspit says, that we psychiatrists cannot possibly hope to handle all of these patients. They will not get to us and, if they did, we would be hopelessly swamped. I think with him the psychiatric clinic belongs in the general medical clinic and should be embodied therein. I agree with him that probably the most effective time to apply psychotherapy is in childhood, and I believe that the family physician and pediatrician could increase the benefits that they contribute to mankind by a very high percentage with a more thorough understanding of mental problems, especially those of childhood.

Dr. Cazenavette: The relationship of the mind to the body has been studied for a great many years; that they are closely related everyone will admit. Yet seldom is the question of mind reaction to physical disease mentioned in our great works on general medicine. Mental disorders have been kept aloof from the field of general medicine. We have, therefore, failed to appreciate the mental attitude toward the disorder of our patients, which amounts frequently to a high percentage.

There is scarcely a patient in our clinic who does not present in some form psychic manifestations which prevent this patient from promptly readjusting himself to his surroundings. The psychiatric clinic has its proper place, and it should form part of our general hospitals. An early recognition of the mental make-up and attitude of the patient who suffers from many ordinary illnesses will go far to shorten the disorder and render the patient capable of earlier adjustment. If one comes across a patient who has been treated with tonics without any beneficial result, because the underlying mental cause of his health has neither been looked for nor discovered, when that mental cause has been disclosed and dealt with properly, the general health is quickly restored to its normal state. It is not until mental causes of maladjustment are laid bare that recovery with adaptation to life again becomes possible.

The disturbed mind is to be blamed for a large part of neurasthenics and psychasthenics. I, therefore, believe that the proper working of a psychiatric clinic will render untold good to these many unfortunate nervous individuals.

Dr. Otis: The essential factor in the field of mental hygiene, wherever practiced, consistently is human understanding of the patient. This, aside from its special features, is the bringing out, so to speak, of the patients from their difficulties. This should be a main factor in any branch of medicine. Unfortunately, many physicians appear on the defensive concerning this special form of therapy and are not endowed with social mindedness. However, this trait should be cultivated. Psychiatry's only request is that you understand your patient early enough to prevent certain serious aftermaths which may necessitate hospitalization for over a long period of time.

It is true complications may intervene and the case become complexed. More so the need of the psychiatrist in reaching in and untangling the web of maladjustment. Psychotherapy, not psychoanalysis, can be used by all of us, in fact any physician who has a concept of psychology may utilize this branch of therapeutics. Dr. Daspit has made mention of the psychiatric clinic. The National Committee and the International Committee are heartily in favor of this, insisting always that these be conducted by a personnel thoroughly equipped mentally and physically and one extensively trained.

There is nothing mysterious about the application of psychiatry to general medicine. It is simply an evaluation of the basic principles of mental hygiene.

Dr. Daspit: I thank Dr. Connely and the other gentlemen who discussed the paper.

For over 20 years I have been connected with psychopathic hospitals, both as staff and as ad-

ministrator, and it has been distressing to see the number of individuals admitted to these hospitals in whom it would have been simple for the average practitioner to have corrected the defects earlier. When we get them in our psychopathic hospitals, our percentage of good results is small. If any good is to be done, it must be done early.

One or two discussants seemed to stress the principal point of the essential psychologic need of the patient. That essential phase I wish to bring before the practitioner and surgeon. I wish to stress the desirability of the general practitioner and pediatrician in recognizing that, associated with their organic picture, is possibly a psychologic phase and a sociologic phase, and, unless we accept the whole patient and attempt to meet his physical and psychologic needs, we do not turn out a good piece of medicine.

I think our medical education system has something to do with that. It is surely responsible for the high-powered, scientific research, full-time teachers whose vision is lost in their own branch and who fail to recognize the breadth of what is necessary in practice.

It is only within the last few years that such bodies as the National Committee for Mental Hygiene and the International Committee have interested themselves particularly in psychiatric education, *per se*. They have gone out to educate the public and they have done it. The profession has found it out. The profession has to prove itself. Now they are trying to educate the profession.

EYES AND TEETH*

CHAS. A. BAHN, M. D.

NEW ORLEANS

The proximity of the eyes and teeth, their frequent association in disease, and their accessibility makes this subject an especially fertile field in the study of focal infections.

European literature infers that tuberculosis is a relatively more frequent cause of ocular disease than our American literature. We give focal infections a relatively more prominent place in the production of endogenous inflammation. It is possible that the peoples of Europe are more sensitive to ocular involvement from some forms of tuberculous infections, and that we Americans are more liable to ocular inflammations from focal infections.

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Such a large proportion of adults are tuberculin positive that we do not attach great importance to the serologic tests alone, unless corroborated by other evidence of Koch infection.

Those with endogenous ocular disease often have multiple causative factors, especially, lues, tuberculosis, and focal infection. The removal of only one of the causes often facilitates ocular recovery. Frequently, many details in the treatment of the various factors are similar.

In considering this subject from a broader viewpoint, our differences of opinion concerning the major etiologic factors are often of less practical importance than superficially appear.

CLINICAL SYMPTOMS

Approximately fifty ocular conditions have been reported in which the teeth are apparently an important causative or associated factor. Although diseased teeth are not the sole cause of the various diseases and symptoms mentioned, their connection is pathologically possible, (a) by direct extension of a septic dental process; (b) by involvement of both the teeth and eyes from a common cause; (c) by fatigue or reflex actions, in which the teeth are apparently a dominant factor; (d) by focal infection of dental origin. The letter beside each condition shows the probable method of involvement.

(A). Organic:

1. Lids; ptosis (c-d), inflammatory edema (a-b-d), chemosis (a-c-d).
2. Lacrimal; dacryocystitis, acute and chronic (a).
3. Conjunctiva; injection; (a-c-d); edema (a-c-d), inflammation of several types (a-c-d), blepharo-conjunctivitis (a-c-d).
4. Cornea; phlyctenular herpetiform, keratitis of several types (d), sclerosing keratitis (d), dystrophies of several types (d).
5. Sclera; scleritis,—transient, superficial, and deep (d).
6. Uveal tract; iritis (d), cyclitis (d), chorioiditis (d), separate or combined, focal and diffuse.
7. Lens; peri-nuclear (b), and toxic opacities (d), possible increase of senile opacities (d).
8. Retinal vessels; embolism (d), thrombosis (d), hemorrhages (d).
9. Retina and optic nerve; retinitis and neuro-retinitis of several types (b-d),

10. Glaucoma; precipitation of acute attack (c-d), and aggravation of pre-existing, simple and inflammatory types (c-d).
11. Ocular muscles; impaired motility from inflammatory edema (d), and paresis (c-d) of third, fourth and sixth nerves.
12. Globe; endophthalmitis (d), and panophthalmitis (d).
13. Orbit; abscess with exophthalmus (d), orbital vein and secondary sinus thrombosis (d).

(B). Functional:

1. Photopsias (c), amaurosis (c), disturbance of color vision (c), neuralgic pains (c), spasm and weakness of extra-and intra-ocular muscles (c), including accommodation and convergence (c).

Sequellae are omitted. Obviously a secondary atrophy would follow a neuro-retinitis; and a scar, an ulcerative keratitis.

Most of the conditions mentioned may result from various toxic foci in the body, the teeth however being one of the most frequent in adults.. This is apparently due to the proximity of the eyes and the teeth, their common nerve supply, and closely related blood supply.

My experience practically verifies that of Bach concerning fifty irido-cyclitis cases of undetermined origin, syphilis and tuberculosis being positively eliminated. Four had no diseased teeth. Dental infection was apparently the only cause of the ocular inflammation in sixteen. Multiple causes were present in thirty, the teeth being a more or less dominant factor.

PATHOLOGY

The seeing mechanism may be affected with or by the teeth in numerous ways.

1. By direct extension a septic process about the teeth may extend into the antrum and then through the nose and lacrimal sac, finally reaching the conjunctiva. This seldom occurs however, conjunctivitis being the most frequent eye disease thus produced.
2. Both the eyes and the teeth may become involved by disfunction in various parts of the body.

The endocrine and other toxic disturbances associated with pregnancy affect

the teeth and also the visual mechanism. This may range from slight functional fatigue reactions such as the inability to comfortably read for more than a few moments, to the serious neuro-retinitis which may necessitate an abortion to prevent permanent blindness.

There are but few places in the body which apparently retain the same cells from intra-uterine life to the grave;—the lens cells of the eye, the enamel cells of the teeth and some cells of the nervous system. Rather oddly, all of these may be affected by some form of para-thyroid disfunction, which causes tetany, a specific type of cataract, and dental disturbance. Defective calcium metabolism in childhood is apparently also associated with dental defect and some eye diseases of which phlyctenular ophthalmia is probably an example.

3. Numerous functional ocular affections may apparently be at least partly caused by sepsis or abnormal pressure of impacted teeth, probably through the complex reflex mechanism of the fifth nerve, sympathetic or para sympathetic, a nutritional or other disturbances. These symptoms range from a slight diminution in ocular endurance to temporary blindness and are most frequent in persons with an unstable endocrine and nervous mechanism whose vitality is at least temporarily lowered.
4. Through focal infection a septic process about the teeth may cause disease in other parts of the body, especially the eyes and joints. Although no theory thoroughly explains the mechanism of all focal infections, we must continue to investigate and try to understand what actually takes place because of its tremendous importance.

The most generally accepted belief is that a bacterial embolus usually containing virulent streptococci becomes separated from its previous home, usually near the apex, of a non-vital or diseased tooth, and enters the peri-dental lymph fluid. It may move about in the lymph ultimately reaching the eye, or it may be carried

through the lymph glands to the common duct and then into the blood stream, ultimately finding its way in the eye. In a lymph gland or in the valves of the heart, this embolus may grow, giving off numerous emboli which may so affect the eye. Under certain conditions it is possible that a bacterial embolus may enter the venous blood stream directly from the peri-dental lymph fluid.

Just why a septic embolus should lodge in the uveal tract more frequently than its area, compared to the entire body area, would justify, is not definitely understood. Rosenow and others through animal experiments have attempted to prove that some strains of bacteria have an affinity for definite parts of the body, especially the eye. These organisms in the circulation apparently stop in the eye there producing a focus of disease.

It is possible that the highly specialized tissues in the eye are more often subject to developmental defects which affect the size and dilatability of capillaries, especially when vasomotor instability or shock exists.

In relatively few cases have the specific causative organisms been recovered from the secondary inflammation in the eye. Either they were not present, or were not found. Some believe that soluble toxins from the bacteria and not the bacteria themselves, may produce an inflammation in a distant part sensitized to that particular poison. In other words, this process is similar to other allergic reactions. Inflammation thus produced would tend to be diffuse rather than focal.

Perhaps a virus or toxin is produced in and about the teeth which travels up the fifth nerve to the Gasserian ganglion. Here it may produce a disturbance which affects the trophic or nutritional fibres in other branches of the fifth nerve. Herpetiform keratitis may possibly be produced in this way.

Frequently important in the transmission of ocular focal infections is that intangible something we call vitality immunity, resistance to disease, or what you like. It is partly inherited and partly acquired. It is often closely associated with our physical and mental living habits, as well as the wear and tear of life.

I have been impressed by the frequency in

which deviations from the normal in a patient's living habits, or in which emotional factors, such as mental shock, have apparently been the sensitizing agent which has caused a previously inactive toxic focus to become active, or a very slight toxic focus to become disproportionately active.

In my experience and in ophthalmic literature, apical abscesses are more frequently causative of ocular disease than dental caries or alveolar pyorrhea. Possibly the new blood vessels which form about an apical abscess are responsible for the increased transmission of focal infection.

Horvath has made the interesting observation that the upper pre-molar teeth are most frequently diseased in ocular involvement of dental origin.

DIAGNOSIS

Unfortunately, it is not possible in the vast majority of patients with ocular disease secondary to focal infections, to determine the character and location of the causative bodily factors from the examination of the eyes alone. The possible exceptions are: syphilis, tuberculosis, leprosy and sympathetic ophthalmia. A characteristic form of lens opacity is frequently seen in some forms of para-thyroid disturbance, which also affects the teeth.

Various physical and laboratory examinations are usually therefore necessary to determine the one or more causative factors which are responsible for the toxic reaction in the eye.

Dr. Tuller has kindly consented to discuss roentgenograms and non vital teeth, which play an important part in the dental treatment of many ocular focal infections. Dr. Johns has also promised to briefly discuss the value of some laboratory tests associated with ocular affections of dental origin.

TREATMENT

Ocular inflammations apparently of focal origin, lues positively eliminated, sometimes greatly improve following the administration of mixed treatment or iodides.

Foreign proteins parenterally injected are being more widely used as an adjunct to other treatment. Milk, 5-10 c.c., which has been boiled three minutes, is most frequently employed. This is injected intra-muscularly into

the gluteal or subscapular region. The subsequent temperature reaction and leukocytosis are apparently associated with the formation of anti-bodies. No therapeutic advantage apparently exists in the numerous substitutes, Aolan, Lactogen, Caseosan, etc., which however are furnished in sterile ampoules. Howard insists upon the superiority of intra-venous typhoid, para-typhoid vaccine in the treatment of ocular focal infections. Twenty-five million organisms is the initial dose, this being increased by a similar amount every fourth day. The injections are continued as long as improvement occurs. Care must be used in the use of this powerful remedy, the difference between the therapeutic and lethal dose being relatively slight.

DENTAL:

PROPHYLACTIC:

Generally speaking, those who have had ocular disease from focal infections, especially from the teeth, are probably more sensitive to a recurrence from that cause unless a compensating immunity is developed. These persons should especially avoid focal infections, and keep their vitality and resistance as nearly normal as possible through their mental and physical living habits. Their teeth should be kept free from any condition which might possibly cause an ocular recurrence.

ACTIVE:

Once the seeing mechanism has become involved, from a dental process, early treatment whether it be tooth removal or not, is important from the standpoint of vision. Once an eye is badly poisoned for any length of time, sight is usually permanently impaired or lost, irrespective of the removal of the tooth or other causative factor. There can be no fixed rule which will intelligently govern the removal of teeth from the standpoint of ocular recovery. The evaluation of the various toxic factors that have produced the ocular reaction and the character of the ocular reaction, must determine the specific means best employed and the chances of restoring vision in each individual.

To preserve eyesight, it is sometimes urgently necessary that diseased teeth be promptly removed. If the dental condition is one of several toxic factors and not the dominant one, dental extraction may or may not be necessary to re-

store sight. Occasionally the extraction of diseased teeth may produce such a severe reaction in the eye that total permanent sight loss might follow. If other dental treatment will arrest the ocular condition, extractions are sometimes best delayed until the physical or ocular condition can better withstand the attendant shock.

Rarely, diseased teeth are best left alone even though they are causing ocular disease. Let us illustrate with the case of a man of over seventy-five years who has numerous diseased teeth which are producing a very slightly progressive ocular condition. There are several other toxic factors. The objective ocular findings indicate that this man will have reasonable sight during the rest of his few years in this world. The extraction of his diseased teeth are not indicated. The discomfort and shock associated with their extraction and the interference with mastication, digestion, etc. would do this old man more harm than the toxins produced by the diseased teeth to which he has possibly developed a slight immunity.

In conclusion, glass eyes have no sight; but artificial teeth do function. If we must choose between eyesight and diseased teeth, the eye should be saved. Uncertainty must be lessened to an irreducible minimum. Then the attendant risks must decide the best course. So many variables enter into these fundamental factors, that no fast rule can be of any practical service, except the golden rule.

CONCLUSION

1. Disfunction of practically every part of the visual apparatus has been associated in ophthalmic literature with dental disease and other focal infections.

2. The teeth are among the most frequent organs which secondarily affect the eyes. Multiple causative factors often exist.

3. The visual apparatus may be affected with and by the teeth directly, or indirectly through the nervous or circulatory system.

4. The ocular affection is very seldom characteristic of dental infection specifically.

5. Physical and laboratory examinations are usually necessary to evaluate the one or more causative factors and efficiently treat the affected eye.

6. Abnormalities in personal hygiene, as well

as emotional disturbances, shock, etc., apparently act as sensitizing agents, which sometimes intensify the toxicity of previously inactive focal infections.

7. Foreign proteins, as an adjunct to other treatment, are being more widely used.

8. It is very important that both extra ocular and ocular treatment be instituted before the affected eye is seriously poisoned.

9. Especially those who have had ocular disease from focal infection, should undergo periodic health examinations because of the increased liability to recurrence.

DISCUSSION

Dr. C. S. Tuller: Dr. Bahn has asked me to discuss the question of roentgenograms and pulpless teeth. The dental profession now denominates the so called dead tooth as a "pulpless tooth" because we recognize the fact that no tooth, even though it has lost its pulp, is wholly dead until it is exfoliated or extracted. There is always life in a tooth from the peridental membrane. Roentgenograms are only an adjunct to any complete diagnosis. The same thing holds good in much of your work as physicians. Clinical examination is of first importance, and roentgenograms give only corroborative testimony, one way or the other.

Recent investigations indicate that, in general, the condition of the apical tissues around the root, are just about what the picture shows; where there is tremendous loss of tissue, active infection is present. Where pathology is slight, there is not so very much or very serious infection and, where there is no evidence of pathology there is generally no infection. That has been proved by a lot of experiments; however, it does not always hold true that, when the roentgenogram is negative, there is no infection in relation to the tooth. It then becomes a question of the judgment of the diagnostician.

Films of the whole mouth are necessary in order to arrive at any reasonable conclusion. And these full-mouth sets of roentgenograms must be good I am going to throw on the screen some slides to illustrate what I mean by good films, and then show some by contrast. And, it seems that these fine sets of films are those which have been brought out by the dentist thru the development of a definite technic and with instruments especially devised for taking radiographs of the teeth. Men who are using apparatus designed for the purpose of taking roentgenograms of various parts of the body find it very difficult to place the patient in a position advantageous for taking dental roentgenograms, and so we do not get the same

result as is possible with specialized roentgen ray apparatus and knowledge.

About pulpless teeth: one eye is worth more than a whole set of teeth. I do not think, any sane, thinking dentist in the country, would suggest the retention of seriously infected teeth in the presence of real eye disturbances that threaten the loss of sight. But the dentist must not be called upon to destroy those teeth which he thinks are not involved in the disease process or which can be placed on a healthy basis. In the event, as Dr. Bahn brought out, it is necessary to do something promptly to save the patient's sight, no intelligent dentist would quibble for one moment. He would help to remove every septic focus of infection in the mouth in order to save the patient's sight. But in the many instances Dr. Bahn cited where there are other contributing foci than the teeth, it may be possible to temporize with at least some of the pulpless teeth. They may be valuable to the patient as a means of proper masticating or perhaps to support masticating apparatus at a later date.

In my opinion, anatomic proximity has no bearing on pathology of the eye or other parts. Except in rare instances, systemic absorption and distribution are the real route. As I stated before, pulpless teeth are not always a menace. Many are as good as vital ones. I am going to show you some slides of teeth that were seriously diseased, that had severe infections, but that have been restored to health.

So you see that it is possible to treat and fill roots of badly infected and diseased teeth and restore them to health, but it is not possible to do so in more than 50 per cent of cases, and it is not possible to do so in the majority of instances in molars. All dental infections do not emanate from pulpless teeth, as Dr. Bahn brought out. We have pyorrhea pockets as a constant source of infection. They, however, draining directly into the mouth, are, as Dr. Bahn stated, not so serious a menace to one's health, except when the disease is rampant in the mouth, as are alveolar abscesses, the toxins of which are being absorbed into the blood stream.

In connection with various methods of diagnosis of diseased conditions of the mouth, one of the common practices of the physician is to resort to the process of transillumination. Whatever transillumination may show with regard to sinuses and other conditions in the body, it is of very little value to the dentist from a diagnostic standpoint. Depending upon the process of transillumination to determine the extent of tooth infection, may completely fool one and a tooth condemned by transillumination may be shown by a roentgenogram to be apparently absolutely without infection. The practice of transillumination has been practically

abandoned by the dental profession as a means of determining anything that is really accurate or worth knowing. It is only corroborative testimony, of a kind.

Dr. F. M. Johns: I feel that Dr. Bahn would like me to elaborate on such special laboratory tests or information that may shed some light on diseases of the eye that possibly occur as a secondary infection, or toxic manifestation, of infected teeth.

In a general way, of course, any disease process that generally lowers the resistance of a patient would lower tissue resistance in the eye. Infections of the uveal tract, which includes the iris, ciliary body, and choroid, are all subject, of course, to toxins circulated by the blood in any acute infectious disease. Infections of the eye following, accompanying, or coming at the same time as such infections are apparently part of them, and are not under discussion presently.

The more chronic diseases may also lower the individual's tissue resistance in a very specific way and such lesions simulate the secondary bacterial invasions from infected teeth. Syphilitic iritis and syphilitic choroiditis or tuberculous choroiditis can properly be diagnosed to some extent by laboratory tests, and such test if positive would absolve the teeth in many instances. Lesions in the eye in syphilis are usually tertiary manifestations and, unfortunately, the Wassermann tests are negative in about 60 per cent of the cases. In tuberculous infections, the test used is the intradermal tuberculin test. This is probably as close to being a perfect test in ruling out tuberculous infection as any laboratory procedure we have. If the patient is injected intradermally with 0.02cc of a 1-10000 dilution of O.T. and does not react, I do not believe even a lesion as small as that seen in an iris or other soft part of the eye could be possibly tuberculous.

In pyogenic infections and those directly due to dental infections, the quantity of tissue involved is so small that I doubt if any laboratory test would give any information at all. We know, of course, that there is a definite, direct, quantitative relationship between the quantity of toxin absorbed and the response of leukocytes in the pimple on the cheek is probably many times larger than a pyogenic lesion in the iris, and it is no more reasonable to expect a leukocytosis in a general way from a pimple than from the quantity of pus produced in the iris or choroid or any other part of the uveal tract. Experience is that in many actual acute or sub-acute pyogenic inflammations of the eyes the leukocyte count is practically normal. This also holds true for the majority of apical tooth infections. In a general way determination of chronic systematic diseases which would lower general tissue resistance and thus

favor initial dental infections with subsequent secondary eye invasions should be investigated by laboratory as well as clinical means. Diabetes, in which there is lowering of all tissue immunity, may only be a blood sugar test in addition to the usual routine urinalysis. Even the ordinary blood sugar taken on a fasting stomach may be normal in mild diabetes; yet, following a full meal, the blood sugar would be abnormally high, evidencing an early or mild diabetes.

Occasionally nephritics also show some evidence of lowered resistance to infection. Functional kidney disorders may best be demonstrated by the phenolsulphonphthalein kidney function test, and this usually long before the so called "blood chemistry" is affected.

The correlation of the diseased teeth and eyes is extremely important. There is no question but that of all of the foci of infection, the teeth are probably most generally concerned in the inception of these infectious processes. The reason in my opinion is largely mechanical. There are two ways of producing secondary lesions from primary infectious processes. One is absorption of toxins from the focus of infection, which will act on a specific tissue in some distant part of the body. It is rather inconceivable to me to suppose that a lesion as small as an apical abscess would produce an inflammatory area in an eye often larger in size than the original lesion by means of soluble poisons or toxins that must be diluted by the entire blood volume which contains the poison. I cannot believe that super-selective poisons can be produced in these small lesions. The small number of diseased eyes cured almost instantly by removing infected teeth must be coincidences. On the other hand bacteria that are constantly perpetuated in such apical abscesses may be forced directly into the blood stream due to the pressure exerted upon these lesions by the teeth in chewing. These may be easily carried out of the blood stream with the constant migration of leukocytes into the tissue, and these start multiplying. An ordinary infected tooth is one in which the root canal has been filled about one-third, a test tube is left in which there is practically no circulation of blood, and in which just enough tissue fluids enter to enable bacteria to survive and occasionally multiply. Sometimes they multiply sufficiently to work their way out and there set up the chronic inflammatory processes that the dentist finds as an apical abscess. If such lesions can be demonstrated by such laboratory means as the roentgen ray they should immediately be suspected of some possible etiologic relationship to present inflammatory eye lesions.

There is no other test in the world that I am familiar with that will enable a person to test the blood or the other body fluids and determine

that there is an infection of the teeth sufficient in quantity to produce an eye disease.

This may be negative evidence if you will, but it is only by knowing our limitations that we can obviate the disaster of drawing wrong conclusions from the absence of definite or "positive" findings.

Dr. Lurie: I have made just a few notations here. The first of these is that the differences between European authorities in the ophthalmic field and those of America, in the determination of whether it is focal infection or tuberculous infection, which may be at fault, might be attributable to the fact of difference of opinion of the existing conditions and to the fact that the progress of dentistry in America is greater than that of Europe. I do not believe that European dentistry has advanced to the level comparable with American dentistry. I believe, therefore, we can probably place more reliance upon the opinion of the American dentist and the American physician that it is focal infection, and not a tuberculous process, causing the eye condition referred to.

The question of non-vital teeth has been brought up. I was glad to hear Dr. Johns explain that the unfilled root that remains is a cesspool from which the infection and bacteria are pumped into the system every time one masticates.

I believe Dr. Tuller said the circulation in the periodontal membrane keeps the teeth from being dead teeth, even though they are non-vital. This may explain the escape of toxic matter and bacteria from the inside of the root canals of teeth into the circulation and into distant parts. Even teeth with well filled root canals may harbor infected matter which may enter the system through this remaining circulation, sufficient to save them from being dead. That raises the question of what is a dead tooth, what tooth is a menace. Many teeth that apparently have a well filled root canal and are apparently doing well for some time are probably the source of much toxæmia and to the roentgenograms only showing the results of infection or changes due to previous treatment.

I doubt the wisdom of retaining, beyond a certain length of time, a tooth which is suspected of being badly infected, because of changes in our vitality, our ability to withstand infections, and to regenerate tissues.

Dr. Tiblier: Speaking from the standpoint of the dentist: when these eye cases are referred to him with the idea of finding some focus of infection in the mouth, he should not limit the examination to foci of infection but should look carefully for other dental conditions; impactions and supernumerary teeth. Because the patient has a full complement of teeth and few fillings, or none, the mistake is often made that the mouth is healthy or normal. We have found, though the cases are

fairly rare, that in eye conditions that are seemingly caused by nerve radiation, supernumerary teeth or impacted teeth as the cause. Since Dr. Bahn did not bring out very much about the effect of impacted and supernumerary teeth in eye conditions, I should like to find out what he thinks about that phase of the subject.

Dr. Hardin: I should like to ask members of the Dental Profession about pulpless teeth which are negative to roentgen ray examination, but which, on extraction, are found to be foci of infection. Should not such teeth be identified as possibilities, even probabilities, in regard to source of infection, in order that we would not be justified in temporizing too long with them? Too many times, pulpless teeth are pronounced entirely negative as to being possible foci of infection, according to diagnosis made from roentgenograms by those whose opinions cannot be questioned, and, finally, when other foci of infection cannot be found, are extracted and these apparently harmless teeth are found to have been the source of infection.

Dr. Bahn: I am sure you will join me in thanking both Drs. Tuller and Johns for their very instructive and interesting remarks. Dr. Lurie's explanation of the differences of opinion that exist in the relative importance of various focal infections involving the eye is very interesting.

I believe that further investigation along the principles he mentions might bring out information of great practical importance.

Replying to Dr. Tiblier, the pathology of ocular involvement from impacted teeth is not entirely understood. I believe with Whitnall and others, that the pressure of impacted teeth may cause excessive and abnormal stimuli in the terminals of some branches of the second and third branches of the fifth nerve. Upon reaching the Gasserian ganglion, some of these stimuli apparently overflow, due either to their quantity or quality. Certain impulses are thus diverted to other branches of the fifth nerve where they may produce functional, sensory, or motor disturbances. A co-existing toxic factor might alter the vaso-motor ocular mechanism sufficiently to increase the liability of the eye to inflammation. From a practical standpoint this rarely occurs.

I will ask Dr. Tuller to discuss Dr. Hardin's inquiry.

Dr. Tuller: There is no hard and fast rule by which we can positively distinguish a pulpless infected tooth from one not infected. If you have seen a roentgenogram of pulpless teeth with infection and then see the pathology change to physiology, as I showed you in some slides, you may be quite certain that there is no infection remaining. It is also possible to take a tooth that is vital in which the pulp must be destroyed be-

cause it is has become exposed and remove the pulp and fill the roots of the tooth and avoid infection altogether. It is always doubtful if you can completely escape the infection, once it has taken place. The object of root canal filling is to eliminate that test tube of infection that Dr. Johns spoke about, and there is no doubt but that his interpretation of pumping the infectious matter into the circulation by constantly chewing on such teeth is the true explanation. In some instances the bicuspid and some of the anterior teeth where the slope of the maxillary bones is such that the apices of the tooth are actually projecting through the bone and into the soft tissues of the face, no pathology can be discerned in the roentgenogram because the pathology may be entirely located outside of the bone in the facial tissues. That brings out again the necessity for careful clinical examination and not placing entire reliance on roentgenograms, however beautiful they may be.

PAINLESS CORONARY OCCLUSION*

I. I. LEMANN, M. D.†

NEW ORLEANS

Excruciating pain so dominates the dramatic picture of acute coronary occlusion that it is difficult to conceive of such an attack without pain. Such, however, is undoubtedly the case, and ample evidence, both clinical and pathological, has been accumulated to substantiate this fact. Recently Nathan Smith Davis III¹ has reported an analysis of 76 cases of coronary thrombosis in which 29, or 38 per cent, had occurred without history of pain. Five of these cases had been confirmed by autopsy. Levine,² in his monograph, remarks that "although severe pain in the chest is probably the most important feature, it may be entirely absent," and says that he has had not infrequent cases that were entirely painless. James B. Herrick³ says that "it is clear we should not stress the symptom of pain too much. We should not, because pain is slight or even lacking, exclude occlusion when other symptoms point to this accident." Although for

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a while the pendulum of opinion had swung somewhat to the side of Albutt, Wenckebach and Vaquez in their conception that cardiac pain is due to the stretching of the acutely or chronically inflamed aorta or aortic ring, there has been a definite swing back in the last few years to the earlier coronary theory of Hunter, Jenner and Parry. Still more recent attempts to differentiate between angina pectoris and coronary occlusion due to entirely different causes are also receding and there is more and more a trend to correlate the more frequently repeated and apparently not so serious attacks of angina with the isolated, terrifying, and even more frequently fatal instances of coronary occlusion. There has come to be a feeling that these differ more in intensity than in kind, more in superficial clinical distinctions than in basic conditions. Herrick quotes Le Count⁴ approvingly to the effect that "somewhere between sudden occlusion and its results and such slowly developing obstruction that few or no symptoms develop lie the lesions responsible for angina pectoris."

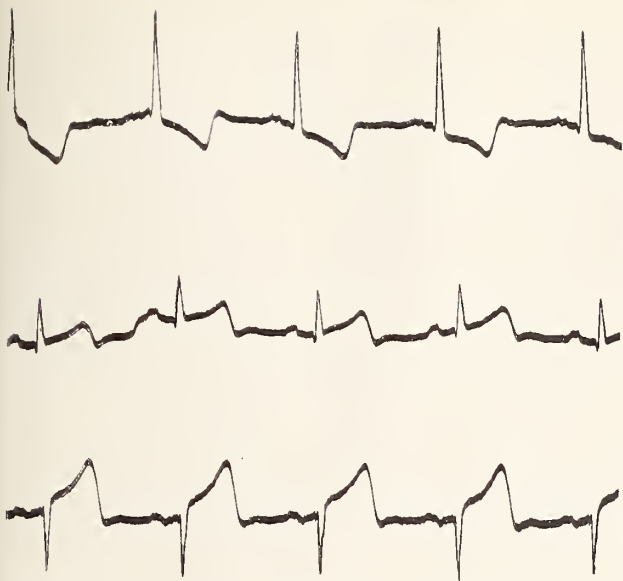
Strong adherent of the coronary theory of cardiac pain as I am, I repeat that I find it difficult to realize that serious coronary accidents can and do happen without pain. Sutton⁵ has shown experimentally that temporary, partial or complete closure of either a coronary artery or vein or both invariably elicits a pain response. He has shown that the pain has not been elicited by localized compression and tearing of the myocardium or pericardium. His observations indicate that pain does not result from stretching either a normal or an injured aorta or aortic ring. Herrick⁶ attempts to explain the occurrence of the painless attacks, and this explanation I accept in default of any better. "It has been suggested, that normally certain areas of the heart are not only less vital than others, indifferent or silent they have been called, but also less sensitive. At autopsy fresh infarcts are sometimes found associated with multiple areas of fibrosis that speak for previous obstruction of small branches, yet no pain has been noted, no pain even announcing the recent infarction.

There has evidently been a very gradual and progressive narrowing of the artery by sclerotic processes. The area irrigated by the artery has become relatively inactive, relatively anesthetized by destruction of vessels, nerves and functioning muscles, so that a painful response to the new obstruction is lacking. The final complete obstruction comes without a sudden shock, the element of surprise is lacking as the heart is in a sense prepared for the supreme insult. Abrupt heart failure with its dyspnea and other phenomena may be present, but pain may be lacking. These are the 'substitution symptoms' in the hyposensitive described by Libman. As Obratzow and Straschesko expressed it, dyspnea may be the pain equivalent."

The cases that I wish to report have, unfortunately, not been proven by autopsy. They carry, however, such earmarks of truth that I think they may serve to illustrate the clinical picture we may expect to observe in the presence of coronary occlusion. If I fail to carry conviction to the minds of all, I hope that at least I may arouse that medical curiosity and suspicion which is one of the strongest and most useful arms of the practitioner. It is he who is armed with this medical curiosity and suspicion who least often fails to make a diagnosis and who, therefore, least often fails to bring definite help to his patients.

CASE REPORTS

Case 1. S. L. W. Male, aged 57 years (at the time of his death in December 1930). A large, corpulent Jew, who had been under my observation from November 1925. Sugar had been first discovered in the urine in December 1922, but he had had inadequate treatment. Within a few weeks after his first consultation he had fulminating appendicitis which had ruptured, causing a diffuse peritonitis. During his stormy convalescence he had had gangrene of his toes. His subsequent years were without special interest. He had been maintained aglycosuric and with normal blood sugar on an adequate diet by the use of insulin. At the beginning of 1928, I observed that he had a systolic murmur at the apex, not transmitted, and in 1929 I noted that his heart was moderately enlarged to the left. His blood pressure had remained 116/64. On December 7, 1930 I was called

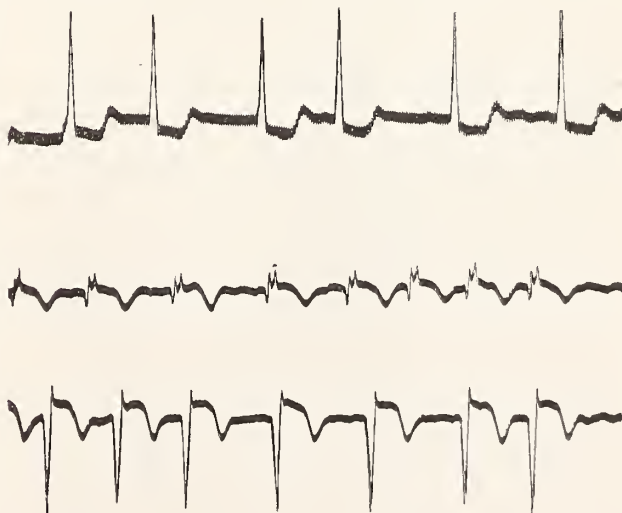


Case 3. Mrs. M. J. G. Age 55. October 16, 1932.
Electrocardiogram: Rate 60; P-R=0.20 sec.; Q.R.S.=0.08 sec. P₁ notched; T₂ high voltage; QRS_{1,2,3} slurred; S-T₁ depressed; T₁ sharply inverted; S-T_{2,3} elevated; left vent. preponderance.
Diagnosis: Sinus rhythm with ECG evidence of myocardial changes—acute coronary thrombosis.

to see him. He was complaining of pain in the left side of his chest. He was seated, fully clothed, and was apparently not very ill. His temperature was 100.5°, pulse rate 80, respiration a little more hurried than normal. I thought he had the prevailing grippe and ordered him to bed. The pain of which he complained at that time was slight and never again did he complain of it. That night he began to hiccough and kept it up practically all night. When I saw him on the morning of December 8, his temperature was 101.5°, pulse 96. There was a loud systolic Jew's harp murmur at the apex. The heart was enlarged to just beyond the nipple. He hiccoughed practically all that night again. At 5 o'clock the nurse recorded that he was very weak, with labored respiration. At 6 o'clock she noted that he had Cheyne Stokes' respiration, that the pulse was 70 and the respiration 44. At 7:30 A. M. she recorded a temperature of 97.6°, pulse 88, respiration 36. At 8 A. M. the pulse was 108, respiration 48. He was very uncomfortable and had difficulty in breathing. When I arrived at 8:45 A. M. he was apparently dying. He was seated upright, breathing rapidly but regularly. The surface was cold. The pulse could not be felt nor could the heart sounds be heard. He was perfectly oriented and had absolutely no pain. He died at 9:40 A. M., after being unconscious about 20 minutes. I do not know how to account for this mode of death except upon the basis of a coronary occlusion, which, as you know, is not uncommon in diabetics.

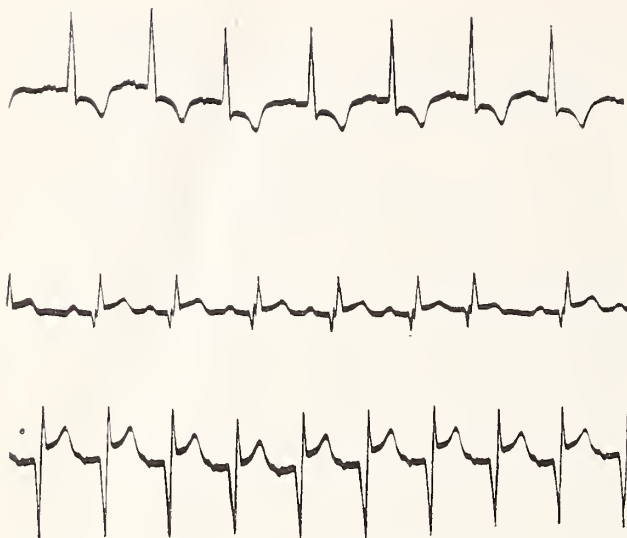
Case 2. S. L. Male, aged 55 years (at the time of his death in November 1931). A well developed

Jew who had never been obese. About 1921 he had begun to complain of pains in the calves of his legs on exertion. The diagnosis of intermittent claudication had been made. In 1930 he began to complain of a "choking" sensation and a shortness of breath brought on by hurrying. He had a feeling in his chest which amounted to real distress so that he felt that he should stop. He had a systolic murmur at the apex not transmitted. The heart was regular, 72 per minute, not enlarged. The blood pressure was 180/100. He continued to complain through 1930 and 1931 of the above symptoms. During 1931 he had had a series of carbon arc irradiations and his blood pressure had fallen to 130 to 140 systolic and 77 to 86 diastolic. On November 6, 1931 he reported "precordial distress, dull, strained feeling in the precordium, sternal region, and pressure in the jaws, cheeks and throat. This occurs now on slight exertion such as taking a shower, bending over or walking a couple of blocks. Coming to a rest always stops it. Belching often relieves." On November 16, 1931, he felt achy and remained in bed. I was called that evening to see him. His temperature was 101.6°. His wife had just recovered from grippe, and I considered from the patient's complaint and fever that he also had grippe. He had just awakened from a sound sleep, complaining only of a generalized aching. There was only the slightest tightness in the chest. The physical examination revealed nothing except a heart rate at 120, respiration 27. When I first came in he was quite calm, but before I left, 15 or 20 minutes later, he had



Case 3. Mrs. M. J. G. October 17, 1933.
Electrocardiogram: Rate, 110. Q.R.S.=0.08 sec. Q.R.S._{1,3} slurred; Q.R.T.S.₂ notched; S-T₁ depressed; S-T_{2,3} elevated; T_{2,3} inverted; left vent. preponderance.
Diagnosis: Auricular fibrillation; coronary thrombosis.

begun to cough. He would lie down and in a few minutes sit up and expectorate some mucus. While he was not agitated, I had the impression that he



Case 3. Mrs. M. J. G. October 22 1932.
Electrocardiogram: Rate 110—130; P-R=0.20 sec.; Q.
R.S.=0.08 sec. P_{1,3} notched; S-T_{2,3} elevated; T₁ inverted;
Q.R.S₂ notched; S-T₁ depressed; left vent. preponderance.

Diagnosis: Sinus tachycardia—coronary thrombosis.

was alarmed. There was no pain. I had no more than entered my house when the telephone rang and I was summoned back. As soon as I entered the room I realized that he was dying, a terrific change having occurred since I left, in less than 5 minutes. He was sitting up in bed, breathing with great difficulty. The surface was clammy with cold perspiration, the pulse feeble and rapid. He was restless and coughing up large quantities of frothy material. Death occurred about an hour from the time when I first reached him on the first visit. The heart ceased before the respiration.

Case 3. Mrs. M. J. G., aged 55 years. The patient first consulted me in June 1932 because of pains in her legs after exertion, fatigability, and depression of spirits. A diagnosis was made at that time of chronic nephritis with hypertension (blood pressure 186/100), intermittent claudication, and chronic constipation. The physical examination showed, in addition to the hypertension, evidences of chorioretinitis in both eyes. On October 16, 1932, while out walking, she fell and struck her head, causing a contused and lacerated wound over the right parietal occipital region. She was unconscious for 10 or 15 minutes. During this time she passed urine and feces involuntarily. She was still semiconscious when Dr. Maurice Sullivan saw her. He found her pulse between 50 and 60, her blood pressure 140/100. She was brought at once to Touro Infirmary and I saw her shortly thereafter. She was by this time thoroughly oriented, asking to go home. Her heart rate was 32, blood pressure 166/70. An electrocardiogram was made immediately, but in the few minutes intervening the heart rate had risen to 60. The electrocardiogram showed the typical changes occur-

ring in acute coronary thrombosis. T₁ was sharply inverted and S-T₁ depressed. S-T₂ & ₃ were elevated and the take-off from the descending limb of the R was at a high point. The P-R interval was 0.20 sec. and the QRS interval 0.08 sec. The spinal fluid was found next morning to be under very slight increased pressure. The result of the examination was negative. There was no blood in it. The subsequent course added additional evidence and in support of the diagnosis of acute coronary occlusion. On the day after admission the patient developed a pericardial friction rub which lasted less than 24 hours. She had crepitant rales at the base of the left lung. She developed, on the second day, a monoplegia of the right arm. On the third day auricular fibrillation set in, of which I show you a tracing. The leukocyte count which was 12,100 on admission rose to 21,000 on the second day, and continued between 14,000 and 17,000 for 4 days. The patient became stuporous after several days and developed high fever, and died with a hyperpyrexia of 107°. Unfortunately, no autopsy was permitted. It will be observed that she had the following evidence of coronary occlusion:

- (1) Typical electrocardiogram.
 - (2) Transitory pericardial rub.
 - (3) Evidence of pulmonary infarction.
 - (4) Evidence of cerebral embolism.
 - (5) Transitory heart block.
 - (6) Transitory auricular fibrillation.
- There was never at any time any pain.

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DISCUSSION

Dr. Heninger: In discussing the paper, one could only emphasize the importance and comparative frequency of painless coronary thrombosis. As the author expressed it, throughout the historical conditions which have led up to the present knowledge of coronary thrombosis, the symptom of importance, of course, was the pain. Now he presents to us three cases in which we are reasonably assured of the diagnosis in which pain is

conspicuously absent. We then may rightly ask the question—if you do not have pain, how can you diagnose such a condition?

My personal experience with the few cases I have seen, one of which has been proved at autopsy (and two others I am thinking of which were reasonably assured) has impressed me with the profound shock and profuse perspiration which the patients have. These two symptoms in my opinion are extremely suggestive of coronary thrombosis without pain; and especially so when accompanied by sudden onset of an arrhythmia. I am thinking about a colleague of ours, a retired doctor, who took ill in his office. I was called to see him about the time Dr. Lemann experienced his last case. About two hours after the onset of this illness, the regular physician was summoned to the patient's home and there was noticed profound shock, profuse perspiration, and an arrhythmia. When I called to see this doctor, he was exceedingly ill and I thought he would die within a short time. We were unable to cope with the situation at his home, so we transferred him to an institution where a diagnosis of auricular fibrillation was made and proved by the electrocardiogram. Treatment was instituted in a rather heroic way to re-establish a regular rhythm. We were successful in doing so in about four days. There was low-grade temperature. Leukocyte count was not made. Four days later, the electrocardiogram showed normal rhythm and typical coronary T wave of Pardee. The patient experienced no chest pain at any time during the acute illness or previous to the onset.

Pain in most cases is probably explained as Dr. Lemann mentioned, but how are we going to explain cases without pain? Recently, we had a report of a number of autopsied cases of coronary occlusion which came from the Mayo Clinic, quite a number occurred in the posterior left branch. As we know, probably there is a little bit more fluid in this area of the heart sac than in the anterior surface. I was just wondering if one may not suggest the possibility of the lack of a reaction to both pericardial surfaces as the reason for lack of pain in some cases.

Due to the comparative frequency of the condition, and the importance, because, no matter what branch of medicine you are in, you are liable to come in contact with the situation, I feel it would be well for us, when teaching, to broadcast this particular fact: that you can have coronary occlusion without pain. Thus, we hope to make this condition more universally known so that it may be placed in the realm of clinical entities that are better known.

Dr. Lyons: I want to say just one or two things about Dr. Lemann's paper, because I think

the point he has brought out is extremely important. I have certainly seen several cases that I considered to be coronary thrombosis in which there was no pain, but, unfortunately, these patients did not come to autopsy. I was glad to hear that one of Dr. Heninger's patients did come to autopsy and could be proved pathologically.

When we have to depend entirely on clinical symptoms without autopsy, we may be making a mistake. One patient Dr. Lemann mentioned I had the unfortunate pleasure of seeing. It was a very typical case of coronary thrombosis; but no pain. Extreme shock, pallor and sweating had developed. He was, in fact, almost dead when I saw him and had edema of the lungs. The history that went before it, with the clinical findings, certainly suggested coronary thrombosis. I have seen two others that were, in my opinion, coronary thrombosis without pain. One was in a physician. In both dyspnea appeared to replace the pain.

If we can keep this fact in mind and try to get autopsies on atypical types of coronary occlusion, we will learn more about the condition. I was rather surprised that, in White's last book about coronary thrombosis, he does not mention anything about the possibility of it occurring without pain, but several authors have stressed that point.

THE PLACE OF ELECTROCARDIOGRAPHY IN MEDICINE*

WARREN L. ROSEN, M. D.†

NEW ORLEANS

In our every day practice of medical and surgical diseases we often overlook the possibility of exhausting our present means of making a diagnosis for our patients. This paper is written to point out a simple test which should be generally used to prevent some of the frequent disasters encountered in practice.

I do not intend to discuss the use of the electrocardiograph in heart disease proper, as its usefulness there has already been only too well proven; but it is in those diseases, apparently not associated with heart changes, that this test can be used to great advantage.

First, let us consider some of the medical

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diseases. We often see patients debilitated following an attack of influenza or gripe. They usually get out of bed feeling fatigued, and the slightest exercise causes vertigo and dyspnea. It is reasonable to believe that as the heart is a muscle, it also participates in the toxemia affecting the other muscles. It is impossible by usual examinations to ascertain to what extent the heart muscle has been damaged, and it is in these cases that the use of the electrocardiograph will undoubtedly be beneficial.

Dr. C. L. Andrews of Atlantic City, in his paper before the American Medical Association meeting in Philadelphia last year, drew attention to the myocardial changes following gripe.

Also Dr. W. Shropshire, in discussing a paper by Dr. J. Kopecky on the uses of the electrocardiograph stated that "the toxin from influenza seems to affect the heart muscle itself * * *. I have noticed that influenza with mild symptoms may affect the heart seriously."

There are, besides gripe, the acute contagious diseases such as diphtheria, pneumonia and scarlet fever whose toxins cause severe damage. Are we not a little too hasty in discharging these patients as cured, without being sure that there is no damage to their myocardium?

Von Küss of Stuttgart, maintains that it is necessary to resort to the electrocardiograph in order to determine the condition of the heart and a correct prognosis in diphtheria cases.

If these early heart muscle changes are not diagnosed and treated at this time, these patients will grow up to be heart cripples. I am sure all of us remember one or more disasters of patients with these conditions who "got out too soon".

These are only a few of the medical conditions which could be mentioned to illustrate the value of this simple test. I do not advocate an electrocardiogram made following every case of gripe or pneumonia, but it has a definite value in cases where we are not certain how much damage has been done to the myocardium.

There is another type of patient to consider for a moment, and that is the individual who is passed off as a neurotic. It is true that frequently these patients exaggerate their symptoms, and are especially susceptible to pain, but now and then we do run across this type with

actual coronary disease or angina. Such symptoms as tingling in the arms or shoulders and slight pains in the chest are not to be disregarded without a thorough examination and an electrocardiogram. It is only by this method that we are able to discover early coronary changes.

And now I wish to call attention to some of the pains which come from coronary disease. The story of acute coronary thrombosis is well known, but these slight pains in the chest, neck, arms and abdomen are passed off with a simple remedy by the practitioner which very often result in tragedies. It would be wise to give these patients the advantage of an electrocardiogram. I want to state here, that the large majority of patients having acute coronary infarcts have, at some time, had early warnings which went unrecognized. We all know of too many cases in which the diagnosis was not made until a final attack. One or two examples of this may better illustrate how cautious we should be before telling patients they are in good health.

A man of middle age, consulted a doctor because of a supposed neuritis in his shoulder. The pain was not severe and as the physical examination was negative, the patient was told to continue his work, golf and other activities. One morning, in a business conference, he died suddenly of angina. This death may have been avoided by making an electrocardiogram at the time of examination.

Another patient, a woman also of middle age, while walking upstairs was seized with a pain in her chest. Again, the pain not being severe, the doctor who attended her did not realize the importance of absolute rest at this time. A few days later, in discussing the case, I suggested the advisability of making an electrocardiogram, which was done. The diagnosis of coronary thrombosis was made and that same evening, while going upstairs again, she died in another attack.

But let us come to the part the electrocardiograph plays in surgery. I venture to say that, with the exception of a few of the larger clinics where all patients have a routine medical examination before consulting a surgeon, not one out of every ten surgeons knows anything about the electrocardiograph.

Although we see comparatively little thyroid

disease in this part of the country, the toxic thyroid patients frequently cause the surgeon great concern. Before a thyroidectomy is performed, the making of an electrocardiogram should be routine. This is best illustrated by two cases which I saw in Touro Infirmary.

The first was a man who had previously had a thyroidectomy performed with a recurrence after fourteen years. He had been toxic for two years before coming to the clinic. Examination showed that he had lost a great deal of weight, had a tremor of his fingers, a fast pulse and was definitely toxic. His B.M.R. reading was plus 28 per cent. A cardiogram made at this time showed his heart muscle in fairly good condition and an operation was advised. Following a thyroidectomy, he developed a temporary auricular fibrillation which was easily controlled. He left the hospital greatly improved and subsequent visits to the clinic showed him apparently well and having gained fifteen pounds in weight.

The second patient had a toxic thyroid also, but had already developed auricular fibrillation. An electrocardiogram showed marked myocardial changes besides the fibrillation and an operation at this time was not advocated. In spite of this, however, a thyroidectomy was performed and death occurred within a few days. This patient would probably have died without an operation but there are many others of this type whose heart condition can be built up to withstand such an operation if the extent of myocardial damage is previously determined.

In the case of uterine myomata, the surgeon can be greatly benefitted by an electrocardiogram. It is well known that the heart muscle sometimes participates in the fibroid degeneration of the uterus. How seldom in these cases is a cardiogram made to determine the extent of myocardial damage? In our department at Touro Infirmary, we frequently found early myocardial changes which have improved following the removal of uterine myomata.

And now a word about the abdominal pains which the surgeon is called upon to diagnose and treat. Diagnoses of cholecystitis, peptic ulcer and pancreatitis are made a little too hastily at times, the physician forgetting that the heart also, can cause pain referred to the abdomen. Again, I am not advocating the routine use of the electrocardiograph in all patients complaining of abdominal distress, but I am making a plea for complete examination, including a cardiogram, in doubtful abdominal pains.

The urologist can often be greatly benefitted by the knowledge of his patient's heart condition prior to removal of prostates or kidneys. He generally deals with a type of patient in these diseases who is elderly and frequently has marked myocardial changes. These conditions are much better known before operation than afterwards.

Drs. Bacon, Kretschner and Woodruff, have pointed out the frequency of heart disease occurring in 321 cases of prostatic obstruction. There were 35.8 per cent with abnormal hearts. Also he showed that 78 per cent had abnormal electrocardiograms. In concluding their paper, they state: "The electrocardiographic study emphasizes the value of recognizing preoperatively the presence of cardiac disease with prostatic obstruction, irrespective of clinical cardiac signs".

There is one other condition I want to mention before closing this paper and that is the problem of the heart in pregnancy. There are a great number of women with heart disease who would like to have children and there are a great number of women with heart disease who are seen after they have become pregnant. A question arises in the first case whether or not to allow them to become pregnant and in the latter case whether or not to allow them to go through a full term pregnancy. Although we cannot predict the exact future of such cases with an electrocardiogram, its use certainly enables us to determine the extent of any myocardial change that exists and to give more intelligent information as to prognosis than any methods now used.

The subject of heart disease in pregnancy was well covered in two papers which were presented at the A.M.A. meeting in 1930 by Dr. Wm. D. Reid of Boston, and Drs. George Hermann and E. L. King of New Orleans. I do not intend to discuss the symptoms and treatment of such conditions here, but merely to suggest the use of the electrocardiograph as an aid in the diagnosis and prognosis of these cases.

In summing up, I want to make a plea for the wider use and knowledge of electrocardiology by surgeons and obstetricians, as well as internists. This test can be made in about five minutes and will undoubtedly prevent many of

the disasters occurring too frequently in modern practice.

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DISCUSSION

Dr. Randolph Lyons: I have very little to add to Dr. Rosen's paper as I think he has set forth his subject in a very fair manner. He has not gone ahead dogmatically and told us that every patient should have an electrocardiographic examination as a matter of routine, when a physical examination is made, but only for certain fairly definite indications and conditions. He has pointed out that certain cases that present certain features which suggest heart involvement of which we are not sure, should have the benefit of an electrocardiogram. I do not believe that the electrocardiograph should be used routinely with every patient who comes for examination, nor is it necessary in every cardiac case. I believe the physical examination and other methods of determining cardiac function are, in many instances, all that is necessary. In infectious diseases, I have had the experience that Dr. Rosen mentions, of having a number of cases following certain infections, notably grippe, develop symptoms suggestive of cardiac weakness. In that type I believe the value of an electrocardiogram is very great. We want to remember that every negative electrocardiogram does not signify a normal heart, nor does an electrocardiogram showing considerable change mean there is a great amount of muscle damage. There are instances in which the electrocardiogram may show marked alterations due to a slight, localized lesion, in the conducting system, for example, yet the rest of the heart be practically normal. A heart like that may go on functioning for years.

The G. U. conditions mentioned by Dr. Rosen have interested me of late because I have had several unfortunate experiences, one only a few months ago. Most of the prostatic cases are in old men and the advisability of operating depends on whether the circulation can stand the strain. In one instance in which a suprapubic was done, the question arose as to whether it was advisable to go on. This man had no definite evidence of myocardial disease. His heart sounds were distant, but no shortness of breath. Previous to the prostatic trouble he had no signs of cardiac disease. I

advised him to have an electrocardiogram made which showed severe cardiac damage, and on the strength of that I advised him not to have the prostate removed. In spite of this, he had the prostate removed and died a few days later of circulatory failure. The electrocardiogram in that instance was extremely valuable in helping to corroborate the physical findings which were not particularly clear-cut.

In thyroid disease, I agree with Dr. Rosen that the electrocardiogram is extremely valuable. We frequently find alterations in rhythm following the removal of a toxic thyroid and the majority of these disappear after a certain time. If, however, there is a suspicion of cardiac disease previous to operation, a careful physical examination, plus an electrocardiogram will go a long way to determine at what stage and time the patient should be operated upon.

Dr. Rosen has brought up such a broad subject that I will not consume any more time except to compliment him on his timely paper.

Dr. Rosen: I want to thank Dr. Lyons for his discussion and emphasize one point he brought out. A negative electrocardiogram does not mean that no heart trouble exists, as we are unable to determine the presence of valvular or pericardial disease with the electrocardiograph until the muscle itself is affected. However, in the presence of cardiographic changes, I am inclined to think that those changes do exist. We find them well borne out by the pathologist.

Again, I want to emphasize the simplicity of this test. It takes only a few minutes to make and it is a shame that doctors in general do not use it more widely.

THE IMPORTANCE OF THE RETICULOCYTE COUNT IN THE DIAGNOSIS AND TREATMENT OF ANEMIA*

F. M. JOHNS, M. D.†

NEW ORLEANS

The preceding century is referred to as the "Iron Age." The present era is the "Age of Electricity," and the rapidity of the times is definitely reflected in the modern high pressure methods of living, sandwich diets, indoor work, aluminum pots, scrupulous cleanliness and anemic men and women.

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Medicine is becoming more and more concerned with the diagnosis and treatment of more of the minor ailments of mankind, and of these, some one of the various types of anemia is presented by the vast majority of individuals needing medical attention. Fortunately, the great majority of these present merely a lowered hemoglobin value because of the relative purity or freedom from iron rust contamination of our foodstuffs. Even in this form of blood deficiency it is questionable if we as physicians are achieving the maximum results from our routine text-book medication instead of adapting a therapeusis suitable for each grade or variety of deficiency.

Blood is a very complex substance, the major portion of which is plasma and we do not know with certainty to the present time from whence it comes or how it is made. The red and white corpuscles are somewhat more easily studied, and in a general way we understand the factors underlying their production and maintenance. For this presentation I wish to discuss in a general way the methods and usefulness of determining the "rate of production of erythrocytes" under normal and anemic conditions and to present some original methods in technic that seem to facilitate this examination.

The life span of non-nucleated erythrocytes as found in circulating blood is probably a matter of only a few weeks. Overstained blood smears show the old ruptured cell shadows that signal their removal from the circulation by the spleen and liver.

The red bone marrow is constantly producing more cells to throw into the circulation to maintain the balance. The freshly enucleated corpuscle still retains some of the acidity of a recently proliferating cell, and when the living cell absorbs certain basic aniline dyes, such as brilliant cresyl blue, the dye is precipitated in the cell to form a mass or collection of particles of a reddish purple color arranged often in the form of a reticulate structure, hence the designation of a "reticulocyte." The number, or percentage, of newly formed cells (reticulocytes) in the healthy adult represents the rate of production of red cells to maintain the effective oxygen carrying capacity of the blood stream. The normal variation (1) lies between 0.2 and 0.8 of

1 per cent. Variations of from 0 to 0.2 per cent indicate a diminished output of corpuscles; while conversely from 1 to 50 per cent indicate increased rates of cell manufacture.

Clinical anemia may be due to a variety of causes, or may occur as an idiopathic disease, but irrespective of the causes, the principal means by which it is produced may be classified into the following groups:

1. Anemia due to direct loss of blood.
2. Anemia due to lack of blood production.
3. Anemia due to an autogenous destruction of corpuscles.
4. Anemia due to a deficient production of hemoglobin.

In addition to the usual laboratory data on hemoglobin, cell count, color index and the physical changes occurring in the corpuscles themselves, such additional information as the corpuscular volume, the reticulocyte count, and the reaction of the bone marrow to treatment may be absolutely essential to the proper classification of a given case. It would be impossible to here outline all of the blood findings in the various types of anemia, but with regard to the importance of the reticulocyte count, certain generalizations are evident:

(1) In an anemia with a normal or increased rate of blood production the cause of the total degree of anemia present must lie outside of the bone marrow.

(2) With a diminished reticulocyte count the bone marrow is either not properly stimulated to blood production or it is unable to function due to some inhibiting influence from without.

The prompt 8 to 10 day response of the bone marrow to liver extract and acid therapy in pernicious anemia, described by Minot and Murphy (2), is probably the most conclusive diagnostic sign of pernicious anemia that we have today. While we are all fairly familiar with this reaction, the usefulness of the reticulocyte response in secondary type anemias is somewhat less well known, and, in fact, is often denied in the current medical literature.

It should be borne in mind that in all types of anemia and from any cause whatsoever there is almost invariably a diminution of the total corpuscle volume. Whether the cells contain

more or less hemoglobin than normal, if they are abnormal in any way, as individual cells they must be replaced, and the total volume restored with normal cells before a cure is effected.

A review of the recent literature shows two articles that throw considerable light on this phase of the subject. Cheney and Niemand (3), of Stanford, prove rather conclusively that secondary anemia due to chronic hemorrhage responds to treatment with a definite reticulocytosis following administration of crude liver extracts and iron. Minot and Heath (4), of Harvard, show that in a large number of secondary anemias with the administration of sufficient iron (3 to 4 gm. of ferrous carbonate or 4 to 6 gm. of iron and ammonium citrate) the reticulocyte count was increased just as definitely as in the primary group, and further that the increase was directly proportionate to the degree of anemia. The reticulocytes in this series attained a peak of 24 per cent on the fifth to seventh day, with hemoglobin increase of 3.9 grams per 100 cc. (about 20 per cent). Full hemoglobin restoration was effected within a period of about a month.

TECHNIC

In the many methods described for staining reticulocytes the mixture of dye and blood results in a heavy precipitate which I have been able to obviate by the following method:

A full drop of a saturated solution of brilliant cresyl blue is spread over the middle portion of a glass microscope slide and allowed to dry. A small drop of blood is placed on the dry stain and immediately covered with a cover glass, placing this so that one corner of the cover glass projects beyond the slide. Allow one or two minutes to elapse, lift up the cover glass and transfer it, with a portion of adherent blood, to a clean slide. Press cover glass down firmly to produce a thin even layer. Focus with oil immersion lens.

In counting the large number of cells necessary to determine the percentage of reticulocytes accurately, it is necessary to constrict the field of the microscope. To accomplish this without the use of expensive microscope equipment I have devised (5) a simple, inexpensive glass disc that when placed on the diaphragm

of the eyepiece presents a series of parallel lines superimposed upon the field to be counted. With the aid of this ocular ruler 1000 corpuscles should be examined for reticulation and the percentage determined by dividing the number of reticulated cells by 10.

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DISCUSSION

Dr. J. H. Musser: I think the fact is rather interesting that many measures which have been looked upon a few years past as experimental observations, possibly of some moment, possibly of no practical value, turn out to be of a great deal of real value.

Some years ago, when we were studying the post-hemorrhagic anemias of splenectomized animals, we would regularly make observations on these anemic animals to determine the percentage of so-called skein forms of red cells. You can appreciate why that particular expression was used if you will revisualize some of the slides Dr. Johns has shown. We saw these cells and felt that they were roughly an index of the regenerative power of the bone marrow of the animal but not particularly exact nowadays. The blood count is not complete in cases of pernicious anemia unless there is made an accurate enumeration of the number of skein cells-reticulocytes present in the blood of that particular individual. As a matter of fact, it is impossible to follow satisfactorily the treatment of patients with pernicious anemia without making frequent observations on the reticulocytes. Bear in mind, if you will, that in cases of pernicious anemia, unless there is proper reticulocyte response following liver, it is safe to say that the case is not one of pernicious anemia. The reticulocytes start in to increase by the third to eighth day, and the maximum increase comes within the eighth to sixteenth day. If this reticular response does not occur, we feel definitely that there is some other cause than pernicious anemia when these patients are given liver extract in adequate doses.

The reticulocyte response in pernicious anemia is in direct ratio to the severity of the anemia. A very slight response occurs in an individual with a count of 4,000,000; a very pronounced response up to 20 per cent some times in an individual with

high grade anemia. The highest counts that you get, incidentally, are in hemolytic jaundice.

I think of particular interest in this presentation today is the evidence brought forth that inadequate amounts of iron have been given in the past to individuals who have hypochromic types of anemia and that the dose in the past, of say 1 gm. of Bland's pills, was woefully inadequate as shown by the failure to have any reticulocyte response from such dosage. It has been shown that adequate doses, 4, 6, 8 times the ordinary dose, will bring about reticulocyte increase in the ordinary individual but not so if the marrow is aplastic. Regenerative marrow can be stimulated by iron, when given in large quantities. Fifteen mgm. of iron daily is sufficient to maintain normal hemoglobin figures. If doses 1000 times larger than this are administered it is safe to say that the iron acts as a stimulant to bone marrow rather than actually replacing the iron that is deficient.

Dr. F. M. Johns: I have nothing further to add. I wish to thank Dr. Musser for his discussion. Dr. Musser was one of the original workers in this field in collaboration with Dr. Krumbhaar of Philadelphia and I am sure his discussion of this topic was enjoyed by all of us.

ARTIFICIAL INSEMINATION: REPORT OF CASES*

JOSEPH COHEN, M. D.

NEW ORLEANS

Cupid shoots his bow and another couple start off on the matrimonial march, loaded down with promises and buoyed up with expectations. Every angle of their future lives was discussed except one. Neither told the other about any abnormality that might interfere with their having a child. And so they parade on, with sterility, the judge, in the reviewing stand, selecting one from every ten to fifteen couples for his barren court.¹

But modern medicine can decrease this starting percentage of sterile marriages and every known method at our disposal should be employed in a continued and sustained attempt to overcome the barrenness. These couples, while wishing and anxious to have children, are easily discouraged and travel about from one doctor to another. At the outset therefore, they ought to be advised regarding the length of time re-

quired to study and correct their individual problems.

In a former paper¹ read before this body, the causes, both male and female, for sterility were given in detail, and the means employed to diagnose them were thoroughly discussed. In addition, methods of treatment were suggested. One of these is artificial insemination.

In 1799, John Hunter injected the semen of a man with hypospadias, into the vagina of his wife and a pregnancy followed.²

In 1866, J. Marion Sims injected semen into the uterine canal with a resulting pregnancy.² And lately, in 1929, Kelly³ and his co-workers opened up the peritoneum of guinea pigs and placed live spermatozoa in intimate contact with the ovaries, with resulting pregnancies.

So all the three possible routes, intra-vaginal, intra-uterine and intra-peritoneal, for implanting the spermatozoa were employed. The last one cannot be of practical use in man for obvious reasons, therefore we confine our activities to the first two, and more especially, to the second one.

Here it is necessary to stress again the point made formerly¹, that every couple should have a complete physical examination to determine the cause for the sterility and an effort made to correct that cause wherever possible. It goes without saying that countless inseminations will not produce results if the tubes are not patulous, or if none but dead spermatozoa are obtained. Therefore the *sine qua non* is to have spermatozoa capable of reproducing and a clear unobstructed canal from the external os through the uterus and through the tubes to the ovaries. In this whole equation the one unknown is the ovary. There is no way at present to ascertain definitely the reproductive capabilities of the ovaries involved or their time of ovulation. Inferences can be drawn from the family history, the personal history, the physical examination, etc., but no evidence except presumptive can be adduced. However, utilizing the recent advances made in endocrinology, the "fertility coefficient," to coin a phrase, of the spermatozoa or the ova can be increased.

In studying the male, obtaining live, moving spermatozoa does not exonerate him. The character and quality of the ejaculate must be

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carefully observed. How many spermatozoa are present? What is the character of the sperm head, the body, the tail? Are the spermatozoa active or sluggish? What is the ratio between the normal and abnormal sperm heads? For a count of less than 1,000,000 spermatozoa per c.c. signifies lessened fertility and a count of less than 10,000, no fertility⁴. Also, it is known that in normal semen the abnormal heads present are not more than 19 per cent to 20 per cent. If they are from 20 per cent to 23 per cent impaired fertility can be assumed, and if above 25 per cent then clinical sterility usually exists.⁵

Therefore, let us be sure that we are dealing with a fertile ejaculate before an attempt to inseminate is made. The specimen may be obtained in one of four ways,—by masturbation into a sterile glass; by coitus interruptus; by means of a condom specimen; or by aspirating the vagina after coitus. I prefer the latter and have used only this method, inseminating the patient within five to thirty minutes after intercourse. When attention is called to the fact that the average couple have intercourse two or three times a week and that the average first baby is born sixteen months after marriage⁶, then it will be realized that much patience must be employed and many inseminations may have to be made before conception takes place.

Whom should we inseminate and when? Every couple that satisfy the above requirements, whether the male has any abnormality preventing him from delivering the live spermatozoa into the vagina, or whether the female has any abnormality that prevents the live spermatozoa from meeting the ovum, are subjects for artificial insemination. And the time to do it is within the first two weeks after menstruation, preferably the first one, because that is the period of greatest fertility⁷.

All the above conditions having been satisfied, the patient is inseminated from five to thirty minutes after intercourse, depending whether the latter takes place in the office or the home. With the aid of a specially constructed canula and a snugly fitting luer syringe, a concentrated amount of the spermatoc fluid is aspirated from the vagina and gently introduced into the uterine canal, care being taken to limit the volume of air and to avoid any unnecessary pressure; if

not, a tubal insufflation may be done and some of the spermatozoa may be forced into the pelvic cavity. Were the definite ovulation period of any particular case known, then forcing the spermatozoa through would produce the same results that Kelly and his co-workers obtained by opening the abdomen and exposing the ova as they leave the ovaries, to the spermatozoa. It is possible, that with the greatest care, I may have insufflated spermatozoa through the tubes bringing them into intimate contact with the ovary and causing an immediate conception. However, if too much fluid is introduced, uterine pains follow, and if too much pressure or too much air, then the typical pains following a Rubin test are experienced. After the insemination, the patient lies quietly from one to two hours and rests for the next two days. It may be necessary to reinseminate her two or more times before success results, as a recital of the five following cases, giving only the salient points, will indicate.

Couple A.—She, aged 24 years; he, aged 28 years. Married 3½ years. Both had sisters and brothers who have children. Her menstrual history began at 12 years, seven day type, never regular, from 4 to 13 months passing between periods. She had a tonsillectomy; one D and C, and another D and C and cauterization of the cervix besides organo-therapy and other treatment to correct this menstrual deficiency. The uterus was acutely ante-flexed, the tubes patent and the ovaries apparently normal in size. The husband was able to deliver live normal spermatozoa into the vagina. On three successive months an artificial insemination was done with a resulting pregnancy. She was delivered prematurely of a male child two hours after an accident in which she received a considerable amount of abdominal trauma.

Couple B.—She, aged 34 years; he, aged 35 years. Married 3 years. Both had brothers and sisters with children. Her menstrual history—negative except for an occasional dysmenorrhea. She had an appendectomy 5 years prior. The uterus was small, ante-flexed with short cervix. The adnexia were not palpable. The husband was able to deliver live, motile spermatozoa into the vagina but they were sluggish and had a slow "fertility coefficient." A plan of conduct regarding exercise, diet, recreation, rest, etc., was given him as well as graduated doses of thyroid extract. He adhered to this for two months during which time intercourse was not restricted. On the third month his spermatozoa improved and an insemination was made with a re-

sulting pregnancy and the delivery of a female child.

Couple C.—She, aged 23 years; he, aged 27 years. Married 18 months. She was the only one married in her family and he had a history of thyroid deficiency in his family. She had an appendectomy three years prior. Her menstrual history was normal except for an occasional early or late period. The cervix was inflamed, elongated, with a thick ropy mucoid discharge. The uterus was retrodisplaced with a prolapsed left tube and ovary. Both tubes were patent. The husband was able to deliver live normal spermatozoa which were destroyed in the vagina. One artificial insemination to get beyond this mucous plug was done with a resulting pregnancy. She will be delivered in May 1933.

Couple D.—She, aged 25 years; he, aged 32 years. Married 5½ years. Her only married brother had children. His only sister-in-law was pregnant. Her menstrual history was spotted with periods of dysmenorrhea and metrorrhagia. She had a D and C for the latter and much organo-therapy for the sterility. She had a small anteflexed uterus, non-palpable adnexa and patent tubes. Her basal metabolic rate was a minus 18. Her husband was able to deliver live normal spermatozoa into the vagina. A plan of living was given her as well as graduated doses of thyroid extract, with no restriction as to intercourse. A few months later she presented herself with a surgical abdomen, and a right oophorectomy and appendectomy was performed for a ruptured graafian follicle with considerable haemorrhage and free blood in the abdomen. A subsequent insemination two months later while she was still following instructions, resulted in a pregnancy. She will be delivered in January 1933.

Couple E.—She, aged 34 years; he, aged 38 years. Married seven years. Both have nieces and nephews. She had four operations, an appendectomy, two D and C's, and a right salpingo-oophorectomy to relieve her sterility besides organo-therapy and considerable medical gynecological treatments. She had an elongated cervix with a pin head external os, ante-flexed uterus, unpalpable adnexia and a patent tube. The husband was able to deliver live spermatozoa into the vagina but they had a very low fertility coefficient. His BMR was minus 21. His mode of living was also regulated and he was given graduated doses of thyroid extract. Intercourse was not restricted. After the fifth month his spermatozoa improving, an artificial insemination was performed with a resulting pregnancy. She will be delivered in December 1932.

CONCLUSION

1. Artificial insemination has a definite place in the treatment of sterility and can be employed successfully.

2. As the above cases illustrate, a careful study must be made of the male as well as the female.

3. Artificial insemination acts as a match maker bringing the spermatozoa in more intimate contact with the ova.

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DISCUSSION

Dr. W. A. Reed: Those of us who are doing urology as a specialty are frequently called upon to decide as to the fertility of given specimens of spermatozoa. There has been so much written on the subject by various investigators such as Meeker, Leib, Moench, etc. that it becomes difficult to decide upon a sensible and practical method of determining when a specimen of spermatozoa can be considered fertile. There are a large number of different types of spermatozoa. If you will permit I would like to show a lantern slide on the screen to illustrate a number of different forms of spermatozoa that may be found. (Slides)

In obtaining a specimen for examination I believe that most of us have been in the habit of asking for a condom specimen, which, of course is brought to us as promptly as possible. I have found that in practically every instance, even with such freshly obtained specimens one finds only a moderate number of actively motile spermatozoa; I should say perhaps one third or one half of the total number. Whether this is due to the fact that the specimen becomes cold while being transported to the office, or whether the combined prostatic secretion is at times so thick and tenacious that the spermatozoa are hindered in their movement, I am unable to say. However, we attempt to determine first the relative number of motile spermatozoa in comparison to the inactive ones. I believe that specimens showing a fairly large number of well formed active spermatozoa and especially when the stained preparation shows only a few with abnormally narrow heads, must be considered potent.

It is our custom to first centrifuge the semen in

order that smears containing a fairly large number of spermatozoa may be obtained. By this method we are also able to get rid of the thick prostatic secretion which is mixed with the semen and makes it quite difficult to obtain a proper smear for staining. As a rule a simple methylene blue stain is quite sufficient. So long as the heads of the spermatozoa are not too small, are well formed, and especially not markedly narrow, we consider them to be fertile. Although some investigators believe that spermatozoa with underdeveloped tails are to be considered defective because of their possible diminished propelling power, I am of the opinion that this is not a point of great importance. Incidentally we are usually unable to obtain specimens of vesicular secretion in which large numbers of spermatozoa are present by digital massage of these organs, and for this reason believe that the only proper method of obtaining specimens for examination is that they be discharged in a normal manner.

A large proportion of those individuals who have suffered with gonorrhea or non-specific urethrites, and particularly where the prostate and seminal vesicles have become infected usually show a much smaller number of active motile spermatozoa than those who have been free of such conditions.

Dr. H. W. E. Walther: I should like to ask Dr. Cohen how many failures he has had. I want to congratulate him on his successes. I think they are very interesting.

I, of course, feel as though we never come in contact with a sterile vagina yet admit that the interior of the uterus is sterile. I should like him to tell us how he prepares the female patient before insemination; whether an attempt is made to free the vagina of any extraneous material.

Dr. Cohen spoke of one case in which there were heavy plugs in the cervix from long standing infection. It seems to me that this matter is not quite so easy as Dr. Cohen would present it to us. I am not criticising the work. I think his successes, as shown by the statistics that he quotes, are quite in favor of more wide adaptation of the method in those childless homes that we all come in contact with.

In regard to studying the male, I must take issue with my good friend, Dr. Reed, in regard to throwing overboard the study of the freshly expressed vesicular secretion. I personally can get no information from condom specimens—practically 99 per cent show dead spermatozoa or so disfigured as to be impossible of any classification. Secretion freshly expressed from the vesicles in the office, and studied there, gives me very much more information as to the actual status of the case. I will admit that very often several massages are necessary to obtain a decent specimen. It

must be remembered that the seminal vesicles are not found in exactly the same position in any two males and that one may think he is massaging the vesicles when he is not anywhere within inches of them.

Dr. R. L. Gordon: One of the interesting features of this is that there are still some people in the world who want to have children.

When I get either a fresh specimen brought to me within a few moments, or expressed from the vesicles, to determine whether or not the spermatozoa are capable of fertilizing the female, one of the little practices I use in the office is to warm the microscopic slide slightly. Spermatozoa placed on a cold slide naturally slows their movement.

As to the exact count of spermatozoa as some of the urologists do, I do not count them. If they are present in large numbers and have, as Dr. Reed said, a fairly good body and are very motile, we figure they are capable of fertilizing the ova.

I must say the greatest stress should be made, in these childless marriages, upon thoroughly investigating both the alkalinity and acidity of the prostate and cervix, for any disturbance of the normal conditions under which spermatozoa live, either by being in too strongly an alkaline or acid medium may cause them to die very quickly.

Dr. A. Jacobs: I believe I understood correctly that the essayist permitted coitus after insemination. What supporting evidence may one have to substantiate the procedure of having been successful, particularly in the case of the one of only 18 months fruitless marriage? Further, consider the individual mentioned who presented a plug in the cervix, is it not possible that the injection of the ejaculate may have cleared the canal? What evidence is there to justify the assurance that in this particular case impregnation was the result of the artificial insemination, or that it was not as a result of subsequent normal copulation because of the clearing out of the cervical canal? Or still further the one presented with a pin-point os in which dilatation preceded the insemination. In this instance I should like to know how long after the dilatation of the canal, was insemination performed because if a sufficient time had not elapsed between the operation of dilatation and insemination, the traumatism inflicted by dilatation will defeat the effort.

Until more profound studies of this question, it is reasonable to limit artificial insemination to mechanical causes; that is anatomical defects of which the more frequent are the deviations or malpositions of the cervix, or cases of stenosis which are much rarer. Vaginismus, disproportions between the male and female organs, and cases of male origin, as the absence or insufficient erec-

tion. (It is interesting to note that in animals ejaculation can easily be provoked by exciting electrically the seminal glands.) Certain contraindications to this procedure must be borne in mind if it is proper to speak of contraindications or more exact of causes of failures constituted by all cases in which sterility is due to a biologic cause as (ovarian insufficiency) or to pathological causes (infection of the uterine mucosa or tubal obstruction). It is evident that a certain number of cases will constitute a temporary contraindication because after treatment and care impregnation will occur through natural normal copulation.

It appears that it is sufficient to introduce fresh sperm in the uterine cavity and that the procedure is very simple. In reality it is a very delicate procedure because the two elements concerned, namely; the sperm and the uterus are, because of different reasons essentially fragile and vulnerable. One must be assured of the biologic vitality of the sperm and it also must be kept in mind that in the aggregate of causes of infecundity that about 30 per cent are of male origin. The fragility of the spermatozoa must be respected; the slightest chilling disintegrates them rapidly, the syringe and all instruments must be maintained at a temperature of about 40°C, which is the temperature of the vagina during coitus. It is equally essential that the syringe and canula be perfectly dry. The presence of water or a small quantity of an antiseptic substance and even of air bubbles introduced through neglect in the uterine cavity, is almost certain cause of failure because the uterus reacts by violent contractions in the presence of any foreign body besides the sperm or ovum. The vitality of the spermatozoa as well as the possible incompatibility between the spermatozoa and ovum should be considered before artificial insemination is undertaken. So far though we have no way of determining this incompatibility. It often has been proved that either individual would be fertile with another mate. After blood transfusion impregnation has occurred not as a result, of course, but because of a change in some way in the biologic condition of that particular individual.

To carry out this procedure in the office is difficult because the woman should rest at least twelve hours and even longer. The time of insemination is an important feature, because it is assumed that ovulation occurs somewhere about the twelfth or thirteenth day. It would be ideal if the time of ovulation could be determined definitely so that the insemination could be done perhaps the evening or the day before the ovulation. For this reason, particularly, the Russian gynecologists inseminate on the tenth, eleventh or twelfth days repeatedly. It is necessary not to pass the instrument beyond the internal os in order to avoid

traumatism to the mucosa thereby exciting uterine contractions. For the same reason it is necessary not to inject a volume larger than 3 c. c. The mode of immobilization of the cervix is an important factor. Difficulties arising because of the vaginal and uterine chemical state must be considered. The chemistry of the vaginal and cervical secretions has the same influences over the spermatozoa as over habituees of the female genital tract. Schreider has shown that spermatozoa distingebrate in less than a half an hour in a solution in which the acidity is above 0.9. It is interesting to note that a French gynecologist reported a most interesting case of a woman who had been sterile seven years after marriage. In order to study the cause of sterility, hystero-salpingography with lipiodol was done. Some time after, the woman became pregnant and gave birth to a normal child at term. Two years after she was delivered of the child she was desirous of having another child and a tubal insufflation was performed but with no result. A few months later a hystero-salpingography was carried out and she again became pregnant. One may ask, then, what mysterious element was there following this particular procedure for the woman to have become pregnant—was it some biophysical change that that occurred due to that particular procedure?

Dr. Cohen: To me, this process is one of the most vital subjects that will ever come up before the Society, because we are dealing with fundamentals. All of you have had the experience of having childless couples come to your office with a prayer and a hope that you may be able to give them relief.

As to my failures, I am very strict with the patients. They do what I ask them to do in toto or I do not have anything to do with them. I reported these five cases because I felt that these five cases did exactly what I asked them to do. There are some others that are still dilly-dallying and do not know exactly if they want to follow out instructions in detail. Sometimes the husband does not want to co-operate, sometimes the wife. I said at the outset and say it again, it takes a lot of time and patience. I do not know when we can consider ourselves failures. I try to limit myself, and I tell the patients that I want two years. If during these two years they do what I ask them to do and we do not succeed, then I am a failure or they are.

So far as getting sterile spermatozoa, or rather sterile solutions into the uterine canal, I want to be permitted to say that the uterus can stand the spermatoc fluid of its particular husband lots better than we think it can. All my cases have had intercourse right in my office. There is a special room set aside for them. I get a specimen within from

five to thirty minutes after the act. A douche is given the woman prior to it. The instruments are sterile and so far the uterus has been able to take care of the spermatic fluid notwithstanding all theorizing to the contrary.

I think the urologists are making a very serious mistake, I mean so far as this particular work is concerned. What the urologist is interested in is not whether the male is able to have living spermatozoa in a condom specimen or whether spermatozoa are alive on his slide. What the urologist ought to be interested in is, is the husband able to deliver live spermatozoa into the vagina and what happens to them after they get there.

We have a test for that and the only test is the Huhner test, which simply means that, after coitus, some of the spermatozoa are obtained from the vagina and examined on the slide. If live spermatozoa are found in the vagina and they are normal so far as motility, number, etc., are concerned, the man is ruled out. If dead spermatozoa are found in the vagina, then one of two things has happened. Either the spermatozoa were killed in the vagina or the man delivered dead spermatozoa. Then we use a condom specimen or have the man masturbate in a glass, and we examine it right there to see if we can find live spermatozoa. It takes quite a bit of persuasion and the whole thing must be conducted on a high level to be able to win the confidence of patients so they will follow out instructions.

Each one of these five cases represented a separate type. In regard to the mucus plug, if that plug could have been washed out in some way and kept washed out, insemination perhaps might have followed. But this couple was married 18 months, long enough to have had a baby. One insemination was made and no intercourse followed. I did not stress the point in the paper, I thought it was taken for granted that, after insemination, no intercourse is allowed until after the next menstrual period or if, as a direct result of insemination, conception has taken place then intercourse is permitted.

The spermatozoa are not as weak as we give them credit for being. I have had spermatozoa on a slide exposed under the microscope by a window for as high as an hour, wiggling around while I observed them.

The alkalinity or acidity of the prostatic or vaginal and cervical secretion is also covered by doing the Huhner test in order to determine whether or not the spermatozoa are able to inseminate the patient.

THE ROLE OF THE ANTERIOR PITUITARY LUTEINIZING HORMONE IN THREATENED ABORTION

A Preliminary Report

J. THORNWELL WITHERSPOON, M. D.†
NEW ORLEANS

That the persistence of the corpus luteum influence is essential in the early months of pregnancy seems to be one of the most established facts in the physiology of the reproductive system. Experimentally, progesterin¹, the corpus luteum hormone, has been found to produce most of the effects already known to be associated with the functioning corpus luteum. Such functions are characteristic decidual proliferation of the endometrium for the nourishment and implantation of the ovum, maintenance of pregnancy, and inhibition of ovulation. Excess amounts of progesterin have been shown even to inhibit the delivery mechanism.

In the human menstrual cycle, the secretion of progesterin begins with the formation of an active corpus luteum following ovulation, and brings about the characteristic premenstrual, secretory changes in the endometrium. Although contrary to Hartman's² views, it is generally accepted that decrease of progesterin or withdrawal of its influence towards the end of the menstrual cycle is followed by menstruation. Any explanation to account for the rise and cadence of the corpus luteum influence must be in the nature of an hypothesis, and suffice it to say that in all probabilities the cause lies in the interrelationship of the anterior hypophyseal and ovarian hormones.

Survival of the corpus luteum and the continued action of progesterin is maintained by fertilization of the ovum, with increase of decidual proliferation of the endometrium and prevention of further menstruation. Ovarian follicular activity is in abeyance during this stage of gestation, since the ovary contains a large amount of lutein cell proliferation, represented by the corpus luteum of pregnancy, and perhaps by a considerable amount of theca lutein tissue. In fact, as shown by Smith and Smith³, folliculin excretion in the urine is markedly increased

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during the corpus luteum control of early pregnancy or from the administration of its hormone.

Only after formation and implantation of the placenta, with the subsequent production or storage of the placental hormones, does the corpus luteum influence begin to wane, a retrogressive process which reaches its lowest ebb of control with the onset of labor. In fact in human beings, progesterin is not a necessary factor for the survival of pregnancy once placenta-tion has occurred, since pregnancy has been known to advance to normal termination after early ovariectomy. However, the influence of the corpus luteum hormone, progesterin, in the early months of pregnancy, does not remain on an even level, but tends to exhibit a rhythmic cadence, somewhat similar to that manifested by it in the normal menstrual cycle. In early pregnancy, at the would-be menstrual periods, the corpus luteum influence is temporarily diminished, relatively or absolutely, and at such periods the occurrence of abortion is most likely to take place, since it is reasonable to assume that insufficient progesterin, by failing to maintain the normal decidual growth, might impair the vitality of the ovum. To prevent such a mishap, it would seem logical that the administration of the corpus luteum hormone at such periods, when the menstrual cycle should appear would have a prophylactic action in warding off any threatened abortion. Also, if threatened abortion did occur, administration of this hormone should tend to alleviate the symptoms, and possibly restore the patient to a condition in which the pregnancy could continue to term.

On this hypothesis 12 cases of threatened abortion were so treated and are offered for analysis. Also a smaller series of cases of habitual abortion are being studied and their results will be published at a later date.

Because the corpus luteum hormone *per se* is not available commercially, and because the anterior hypophyseal hormone is produced in large amounts and in an explosive fashion (Zondek) in early pregnancy, the anterior pituitary luteinizing factor was employed in the form of Follutein⁴ (Squibb), and this factor, as shown by Novak and Hurd⁵ (Antuitrin—S), has proven to be an equal, if not superior substitute for the crude progesterin that is being used

in animal experimental work. This commercial factor is free from all ovarian follicular hormone.

The differentiation of symptoms between the unpleasant effects of normal pregnancy and the warning signs of threatened and inevitable abortion is a matter of degree, and individual interpretation generally concludes the final diagnosis. However, in order to have some definite standard of diagnosis, threatened abortion in this series of cases, is defined as that state of being in the early months of pregnancy, associated with pelvic cramps, uterine bleeding and two-finger dilatation of the cervical os, through which the uterine contents can be palpated. Possibly this definition borders more closely that of inevitable abortion, and if this be the case, beneficial results in the restoration of the pregnancy to its normal course by the administration of the anterior lobe luteinizing factor would be all the more effective.

Twelve women in the early months of gestation, with the symptoms of pelvic cramps, uterine bleeding, and two-finger dilatation of the cervical os are analysed, after administering the anterior lobe luteinizing factor. Follutein was given in daily increasing doses, beginning with .1 to .2 cc. amounts and doubling the quantity until .5 cc. had been reached; this dosage was then maintained until the uterine flow had checked. Initial large doses gave rise to painful local areas. As a control 12 pregnant women with similar signs and symptoms were studied. No patient in the control group received any hormonal therapy; only morphia and other sedatives were administered as indicated. All 24 patients were treated on the same ward, so the general nursing care can be considered uniform. The following findings are offered.

The age of the 12 patients treated averaged 27 years, with limits of 18 and 39 years. 8 women had borne children previously while only 3 offered a history of former miscarriage. A similar number of patients admitted the present abortion to be illegally induced. The duration of the existing pregnancy averaged 3 months, although 2 patients were 6 months pregnant. The duration of the symptoms before hospital entry extended over an average of 3 days, and every patient had at least two-finger

dilatation of the cervical os, which was soft and succulent. Follutein was given hypodermicly as described, and the average amount administered before uterine bleeding was checked was 1.5 cc. Cessation of flow occurred in 2 instances almost immediately, but in 4 cases there was no stoppage of the bleeding until after abortion had occurred. The average duration of flow after the administration of Follutein was 2.3 days. 6 patients aborted in the hospital after 5 plus days of Follutein therapy. An equal number of patients were discharged apparently cured since they were symptom-free. All were advised to remain in bed while at home for a period of 7 to 10 days, however 4 of these patients aborted at home on an average of 1 week later, and all reported in their follow-up history that the abortion occurred shortly after getting up from bed. There was no follow-up report on 2 patients. All Wassermann reactions were negative. Morphine was given to 4 patients; only 2 cases exhibited fever while in the hospital.

All 12 of the control group of patients aborted while on the ward, on an average of 3 plus days after admission.

COMMENT

The administration of the anterior pituitary luteinizing hormone in cases of threatened abortion is rational therapy, and apparently beneficial as shown by this group of cases in which 6 patients (50 per cent) were discharged from the hospital symptom-free. However, 4 of these patients aborted at home on an average of

1 week later, after all luteinizing hormonal therapy had been discontinued. Whether or not continuation of the anterior lobe hormone treatment at home would have prevented these 4 patients from aborting is a matter of speculation. The fundamental question to decide is whether an attempt should be made to save cases of threatened abortion, progressed to the stage described in this paper. Is not spontaneous abortion often one of nature's methods of insuring itself against the propagation of deformed fetuses and monsters? Perhaps evidence along this line is demonstrated in this series in having 2 cases of threatened abortion change over to missed abortions before the miscarriage of a dead fetus occurred some 7 to 10 days later. The answer to this question might be found in the administration of the anterior pituitary factor as a prophylactic in cases of habitual abortion, and to threatened abortions not sufficiently advanced to disturb the viability of the fetus.

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THE STATE MEETINGS

The members of the House of Delegates of the Louisiana State Medical Society met in New Orleans the latter part of this month to transact the business of the organization. It is unfortunate that the regular State Meeting was deemed impracticable on account of the present economics conditions. It is hoped that next year the meeting will be even larger than any in the

past because of the necessity of deleting this year's meeting.

The Mississippi State Medical Association will meet in Jackson the second week in May. There has been prepared a really splendid program which should appeal to all classes of physicians, be they specialists or in general practice. The meeting at Jackson promises to be a very real occasion, to judge from the program that is appearing in the Mississippi Section of the Journal. Louisiana physicians extend to their Mississippi confreres their heartiest best wishes that this their Annual Meeting, will be a tremendous success.

HEART DISEASE AND PREGNANCY

The problem of the woman with heart disease who is pregnant and approaching term is one of the many enigmas which frequently troubles the attending physician. Queries which enter the mind of the man who has to make the decision are: what should be done with a particular woman in regard to termination of pregnancy and how should it be terminated? Frequently there is presented to the physician another phase of this problem, namely, whether or not the young woman with heart disease should become married, and secondly, whether or not she should bear children.

It might be well to present succinctly some facts concerning heart disease as it occurs in pregnant women with the possibility that such data may help in elucidating these problems. First, let it be said that in the great majority of instances, from the etiologic viewpoint, the type of heart disease is that which is represented by injury received as a result of rheumatic infection. For various reasons this is the one important type of heart disease which has to be dealt with in the primipara or in the young woman who is not yet married, or if married, has not yet become pregnant. It is this type of heart disease that causes mitral stenosis and regurgitation. Of the other important etiologic types of heart disease it might be enunciated that bacterial endocarditis is an acute febrile condition which need not worry the physician: the syphilitic heart does not develop as a rule

until fifteen or more years after the original lesion; the thyroid heart is comparatively rare; and, of course, the heart of senescence does not make its appearance during the third decade of life. Various authors state that the rheumatic type of heart make up probably ninety per cent of the deceased hearts that are found in a pregnant woman. The diagnosis of this type of heart disease is not difficult. It is hard, however, to determine the functional efficiency of such a diseased heart. Probably the most important factors, granting that the patient has the classic symptoms and the reliable signs of organic heart disease, are the responses to effort and the history of having had a previous cardiac break down. The prognosis is always more serious if the heart has failed and subsequently recovered, and it is always somewhat questionable if such a heart will be able to stand the stress and strain of pregnancy. The responses to work can be gauged by ordinary functional tests or by the simple process of judging the ability of the individual to carry on her daily physical duties and activities. If the patient has not had cardiac failure and can do the ordinary things of daily life then, despite outstanding physical signs of mitral disease that woman can probably go through pregnancy without much difficulty, the physician always bearing in mind that the pregnancy should not be prolonged and should be terminated as rapidly as possible. In the individual young woman who has had heart failure and whose exercise response is poor, it is doubtful whether the physician should state dogmatically she should not have children. As Hay and Hunt* state, "motherhood is womans privilege, a privilege which the physician has no right to refuse without adequate reason." In view of the fact that in a large series of cases it has been found that the mortality rate in the cardiac patient is somewhat under ten per cent, and in view of the re-

sults that have been obtained in the Boston Lying-In Hospital where patients with heart disease were carefully watched and observed during the pregnancy, had a maternal death rate of only 3.3 per cent, it is doubtful if the doctor can possibly express the opinion definitely and dogmatically, that a heart is unable to withstand pregnancy.

It is very comforting indeed, in reviewing the literature of the subject, to note the cheerful optimism of the majority of writers. Reid* says, "undue pessimism as regards the prognosis of all cardiac patients who are pregnant is not justified by facts; there appears to be too little faith in the ability of the heart to withstand pregnancy and parturition." It seems then to be reasonable and sane advice to tell young women about to be married, or already married and pregnant, who have heart disease, that they can go through one or two pregnancies successfully, but that further pregnancies should not be permitted, as with each pregnancy there is a certain amount of degenerative changes taking place in the heart which renders each subsequent childbirth more dangerous to the mother than the former ones. It seems reasonably safe likewise, to generalize and to say that only if congestive failure occurs during the last trimester of pregnancy and is not getting better with rest and digitalis, that then pregnancy should be terminated by a cesarean section which should be performed by a competent operator, in order to obviate the strain upon the heart which prolonged labor is likely to occasion. In the first six months, pregnancy throws but little strain on the heart, therefore the heart condition should be the primary consideration; careful nursing and proper treatment will restore compensation in the majority of instances without any ill effects to the mother or the fetus, but if it does not, the heart failure, dependent on factors other than the pregnancy, will kill the patient irrespective of whether or not she is pregnant.

*Hay, John and Hunt, E.: Fifty Consecutive Cases of Pregnancy, and Parturition in Patients with Crippled Hearts, *Lancet*, 1:271, 1928.

*Reid, W. D.: The Prognosis of Heart Disease in Pregnancy, *Am. J. Ob. & Gyn.*, 19:63 1930.

HOSPITAL STAFF TRANSACTIONS

GREENVILLE KING'S DAUGHTERS' HOSPITAL

The regular monthly meeting of the Greenville King's Daughters' Hospital staff was held April 5, following a dinner at the hospital. Dr. C. P. Thompson presided.

Recommendations were presented by Dr. A. G. Payne and approved by the staff, which should increase the interest and instruction to be derived from these meetings. In addition to the regular program, hereafter two members will report briefly on current professional literature; and the laboratory and x-ray departments will have on exhibit any interesting material which has developed during the month.

Dr. T. B. Lewis spoke to the staff on the subject of extrauterine pregnancy. He discussed the clinical signs and symptoms of extrauterine gestation and rupture. He reported an interesting personal case in an unmarried woman, whose mother he had treated for the same condition some years earlier. The patient had long been subject to recurrent attacks of subacute appendicitis, and reported that she had experienced an especially severe attack in which she almost fainted. After a week's illness the patient volunteered information which led to a correct diagnosis. A distinct mass was palpable within the pelvis on the right side. There was no bleeding until just before operation, two weeks after the onset of symptoms. At operation a solid mass of blood clot was removed from the right side of the pelvis, together with the ruptured tube. The patient made an uneventful recovery.

In the discussion, Dr. E. T. White said the Ascheim-Zondek test, which is relatively easy to perform, has a diagnostic value of from 86 to 90 per cent in these cases. Dr. A. G. Payne made a plea for the conservation of tubal function when operating for ruptured extrauterine pregnancy.

Dr. A. G. Payne presented the history of a case having a bladder tumor, which raised interesting points in the differential diagnosis. The patient was a man, aged 46 years, complaining of dizziness, irritability, forgetfulness, bed wetting, and frequent urination of small amounts. He had not felt well for several months. The past history was unimportant except that ten years ago he had received treatment consisting of "shots".

On examination he was unable to elaborate answers to questions, and his speech was slurred. His gait was unsteady, but his reflexes normal. There was no sensory disturbance, although he had had shooting leg pains. A detailed physical examination was otherwise negative except for a soft movable

tumor which was palpable in the right iliac fossa.

The Wassermann reaction was positive in blood and spinal fluid; the latter contained 228 cells, 66 per cent of which were lymphocytes. Cytologic examination of the blood was negative. The urine showed a trace of albumin, a few pus cells, but no blood.

A cystoscopic examination by Dr. O. H. Beck showed the palpable mass in the right iliac fossa to be a dilated bladder, showing a moderate hypertrophy of the median lobe of the prostate, hypertrophy of the bladder wall, with coarse trabeculae, and many small diverticulae. A diverticulum in the fundus showed a papillomatous growth within it when entered by the cystoscope.

The patient was given 0.6 gm. neo-arsphenamine. This was followed by aggravation of mental symptoms, requiring forcible restraint of the patient. Later he was quieted by amytal. Smaller doses of neo-arsphenamine were repeated over a period of a month. By this time the mental state had returned to normal. Cystoscopic examination showed great improvement in the condition of the bladder.

In the discussion Dr. Beck showed several cystograms. He and Dr. C. P. Thompson, both of whom saw the cystoscopic appearance, felt that a gumma was present in the bladder wall.

Dr. E. T. White, who examined several sections of a biopsy specimen taken from one of the trabeculae, said the specimen showed a chronic cystitis. He was able to exclude malignancy, but could not exclude syphilis.

Dr. Payne in closing said that while retention and hypertrophy of the bladder were present, he did not feel that the appearance was entirely accounted for on this basis. The improvement in the bladder following antiluetic treatment suggested that what appeared to be a tumor, might very well have been a gumma.

Dr. Perry presented the health departments' February report.

John A. Beals,
Secretary.

VICKSBURG SANITARIUM

The regular monthly meeting of the staff of the Vicksburg Sanitarium was held on April 10. Special case reports presented included:

1. Bladder Neck Obstruction of Unusual Type and Origin Relieved by Transurethral Resection.—Dr. A. Street.

2. Pregnancy Complicated by Fibroid.—Dr. J. A. K. Birchett, Jr.

Discussed by Drs. L. J. Clark, G. M. Street, G. C. Jarratt, and L. S. Lippincott.

3. Osteo-Arthritis of Lumbar Spine.—Dr. L. J. Clark.

Discussed by Drs. A. Street, J. A. K. Birchett, Jr., and G. M. Street.

4. Migraine and Psychoneurosis.—A Diagnostic Problem.—Dr. R. A. Street, Jr.

Discussed by Drs. A. Street, and G. C. Jarratt.

THREE-MINUTE REPORTS OF THE LITERATURE OF THE MONTH were presented as follows:

1. Dr. A. Street.—Jejunostomy,—Causes of Complications and Death.

2. Dr. L. S. Lippincott.—Polypi Coli.

3. Dr. J. A. K. Birchett, Jr.—Jejunal Ulcer.

4. Dr. G. C. Jarratt.—Congenital Syphilis.

SELECTED RADIOGRAPHIC STUDIES WERE PRESENTED AS FOLLOWS: Legg-Perthe's disease associated with osteitis fibrosa cystica; Pulmonary tuberculosis; Aneurism of arch of the aorta; Calcified ovary; Renal calculi (2 cases).

Dr. Hugh H. Johnston, who has been at the Mayo Clinic for three years, was reinstated as a member of the staff.

The next meeting of the staff will be held Friday, May 21, at 6:30 P. M.

Leon S. Lippincott,
Secretary.

Abstract.—Bladder Neck Obstruction of Unusual Type and Origin Relieved by Transurethral Resection.—Dr. A. Street.

Patient.—White male, aged 48 years, married; examined on January 24, 1933.

Three years ago was being treated for stricture of the urethra (gonorrhea as a boy). As dilatation with sounds did not seem to give satisfactory relief, a Coleman dilator was used and opened widely. Following this, was very ill and abscesses formed in the perineum, scrotum, and around the base of the penis. Incision of these abscesses left multiple urinary fistulae. Voiding still difficult and general health has declined sharply. Has changed from a strong robust 200-pound man to an invalid weighing only about 100 pounds. At this time his doctor very wisely did a cystotomy and drainage. Health then improved markedly. After gradual dilatation of the urethra until a No. 26 F. sound could be easily passed, a wide perineal incision was made by his doctor and extended to include dissection of the various fistulae. After the perineal wound had healed, the superpubic wound was allowed to close. A small perineal fistula persisted. In spite of the fact that a No. 26 F. sound could be readily passed, voiding remained difficult. For the past two weeks dysuria has been severe and there has been bloody urine. His doctor states that he feels a "click" when he passes the sound into the bladder. The above history covers a period of three years.

The principle result of examination on January 24, was that the roentgenograms showed two large

vesical calculi, each $\frac{3}{4}$ inch in diameter. His doctor, an excellent surgeon, was advised to take him back home and to the hospital and to remove the stones by suprapubic operation, leaving the suprapubic drain in place; then when recovery had progressed sufficiently, to return him for cystoscopic examination of the posterior urethra. This was done and the patient reported to me again on February 25, in good condition, the stones removed, and a suprapubic tube in place.

Cystoscopy on February 26, showed bladder mucosa normal aside from very slight congestion. The internal urethral orifice was markedly contracted. The cystoscope was then removed and the McCarthy prostatic electrotome introduced. The contracted bladder neck could be observed better with this instrument. The margin of the orifice looked unusual because the tissue was so white and free of markings. There was no bleeding. The orifice seemed placed high and there was a deep vesical pouch posteriorly. With a high frequency cutting loop, transurethral resection of the posterior part of the orifice was begun. Tissue was very dense and there was no bleeding from the cut surfaces. After enlarging the orifice backward for about one-half inch, it was observed that the last section had opened another passage, posterior to the one in which the instrument was placed. The end of the instrument was withdrawn enough to introduce it into the posterior channel, which was easily observed to be the true prostatic urethra. The anterior channel was evidently a well epithelized false passage. The electrotome was again introduced into the false passage and the cutting continued, dividing the small remaining portion of the septum between the two passages, converting them into one internal orifice. The markings of the posterior urethra could now be observed. The verumontanum was not remarkable. The prostatic ducts appeared normal. Anterior to the verumontanum and prostatic ducts there was a very patent opening which was probably that of the perineal fistula. At the posterior margin of the bladder orifice, there was still a transverse elevated bar. This was cut down to the level of the trigone. A catheter was left in the urethra (No. 24 F.). The operation was performed under spinal anesthesia, 85 milligrams. Post operative condition was good.

The suprapubic drain was removed on the third postoperative day. Patient returned home on the fifth day. He was advised to leave the catheter in the urethra until ten days from time of operation in order to favor permanent epithelization of the old areas of the urethral stricture.

I have recently had a report from his home surgeon who states that the patient is entirely relieved, urinates normally, suprapubic wound is closed and perineal fistula has healed.

Abstract.—Pregnancy Complicated by Fibroid.—Dr. J. A. K. Birchett, Jr.

Patient.—White female, aged 33 years, married, clerk in government office.

History of Present Complaint.—Two weeks ago had sore throat and head cold which she thought was an attack of influenza. Following this condition there was nausea and vomiting with some increase in temperature and general aching suggestive of gasfro-intestinal influenza. While in bed with this disturbance she noticed a mass in lower abdomen which was painful and there was some menstrual flow, black blood, which lasted only two days accompanied by stabbing-like pain in left lower quadrant of abdomen. Last normal menstrual flow was free, lasting five days and ended on January 22. There was a menstrual period in February which did not last but one day. This is not unusual as she has menstruated irregularly for past five years.

Physical Examination.—Well developed and nourished young white woman, not acutely ill. Temperature 99.3-5°F. Pulse 100. Teeth in good condition, tonsils small and cryptic, tongue coated, nares show evidence of recent coryza, eyes negative, no thyroid enlargement. Heart rate slightly increased, otherwise negative. Blood pressure, systolic 120, diastolic 80; lungs negative.

Abdomen—Movable mass size of four months' pregnancy in lower left quadrant of abdomen apparently left ovary or fibroid mass, is rather hard on palpation. There is pain felt when the mass is depressed, mostly in left side of pelvis.

Vaginal examination reveals rather soft cervix, slight leucorrhea. There is a mass size of large grapefruit, hard and is mostly felt in right upper fornix. A mass to the left which is continuous with the cervix is rather soft and gives the impression of a pregnant uterus.

Laboratory Findings.—Wassermann, negative; blood: hemoglobin 67; color index 0.95; red cells 3,530,000; leukocytes 8,500.

A diagnosis of ovarian tumor with twisted pedicle was first thought of because of rapid growth of mass, sudden onset of pain and passage of blood with menstrual irregularity. The firmness of mass suggested fibroids but there was no history of menorrhagia or flooding. Pregnancy was not suggested by history as menstrual cycle had been regular, especially the last two periods, and the mass had developed according to patient's statement in the last three or four weeks, but the consistency of the uterus and the cervix made pregnancy a positive evidence.

Operation was advised for removal of the pelvic mass as there had already developed a secondary anemia from hemorrhage of a week ago and we felt certain that if a pregnancy were present that spontaneous abortion would occur. Of course ovarian cyst or malignant tumor twisted on pedicle or

a pedunculated fibroid in a similar condition necessitated surgical interference.

After two days' observation during which time temperature became normal and pulse improved as to quality and volume, a laparotomy was done under general anaesthesia. There was a large fibroid growing from left cornu and including one-half of the fundus of the uterus and twisted forward and downward into the right pelvis behind the uterus which was rotated on its long axis towards the left. The uterus was the size of a large orange and had the appearance of a pregnant uterus. There were several small fibroids distributed over the body of the uterus. The appendix was hypertrophic, covered with thin adhesive veils and showed evidence of acute inflammation.

A subtotal hysterectomy was done. Both tubes and ovaries were normal and were not molested. All raw surfaces were carefully peritonealized. The appendix was removed by purse string method. Patient made an uneventful recovery, up in chair on 10th day and home in two weeks.

Diagnosis of surgical pathology was as follows: Appendicitis, chronic and acute; pregnancy, acute inflammatory; endometritis, chronic and acute; fibro-leiomyoma of uterus, multiple (largest degenerating).

Abstract.—Osteoarthritis of Lumbar Spine.—Dr. L. J. Clark.

Patient.—White female, aged 54 years, married; admitted to hospital March 6, 1933.

Complaint.—Pain in lower central back, began about twelve days ago, continuous, radiating down legs and across to lower abdominal region. Gradually getting worse and so intense at admission that she was never easy; seemed to get more relief by walking and sitting up. No nausea or vomiting; bowels regular; no fever or chills. Had noticed more pain in abdomen recently with some swelling in past few days. No urinary symptoms; no diarrhea. Increasing difficulty of respiration.

Physical Examination.—Temperature 99°F.; pulse 80; respiration 22, slightly labored; blood pressure 140/95. Well developed and nourished, apparently somewhat uncomfortable, especially on reclining. Lungs clear but dullness extends slightly above normal limits on each side. Abdomen slightly distended, slightly tympanitic and markedly rigid; no localized tenderness or masses; dullness increased in flanks and somewhat in lower abdomen. Cervix small; uterus apparently infantile; adnexa could not be examined on account of extreme rigidity of abdomen.

Leukocyte count 10,600; neutrophils 65. Catheterized urine, rare pus cell. Wassermann, Kline and Young and Kahn tests, negative.

Röntgenograms of spine show arthritis of lumbar spine with evidence of considerable destruction of joint surfaces and apparent obliteration of

intervertebral spaces, especially lumbo-sacral articulation. There is also a rounded shadow size of a walnut, densely and irregularly mottled, inside the bony pelvis, apparently connected to bony wall, possibly a calcified right ovary or a calcified uterine fibroid. Roentgenograms of the urinary tract were negative.

Treatment.—Put to bed and treated palliatively. On account of severe pain and paroxysms of dyspnea opium was necessary at times. No nausea or vomiting nor any tendency towards constipation. Pain continued in the lower central back, radiating down the legs; no tendency towards localization of abdominal pain.

The most annoying and alarming symptom of the entire condition was the board-like rigidity of the entire abdomen. At first the abdominal contents were somewhat tympanitic but later the entire abdomen seemed to change to a dull note. I am inclined to believe that the paroxysms of dyspnea were due to the abdominal distention and rigidity. During eleven days in the hospital there was only very slight decrease in the abdominal rigidity although there was a definite improvement as regards the pain.

Knowing definitely that there was arthritis with erosion of surfaces of the lower lumbar vertebrae, the chief question was as to the cause of the abdominal symptoms. The first thought in the presence of board-like rigidity is of rupture of a viscus, but there was no other symptoms or signs of peritonitis. Blood count was low, there was no definite continuous febrile course and no evidence of obstruction. It is possible that there were rupture and extravasation of a sterile material into the abdominal cavity. It is possible that abdominal rigidity was due to pressure on nerve roots in the region of the arthritis, producing nerve irritation and spasticity of abdominal muscles. An exploratory operation was not deemed wise.

The condition is still undiagnosed and there is no improvement. Abdomen is more rigid and possibly more distended and there is more dyspnea and evident cyanosis. There are no positive cardiac signs.

Abstract.—Migraine and Psychoneurosis—A Diagnostic Problem.—Dr. R. A. Street, Jr.

Patient.—White female, aged 41 years, married, housewife.

Present Illness.—For past four days has been nauseated constantly and vomiting small amounts frequently; not projectile; much gaseous eructation. For past several weeks has had severe headache, beginning in frontal region and radiating back to the occipital region and down the back of the neck. Headache is not relieved by "hypos" and is almost continuous.

Past History.—For past 20 years attacks similar

to present. May come on at long or short intervals but have been increasing in severity recently; usually last about a week. Not related to menses and not relieved by any oral medication.

For past 10 years has increased markedly in weight. Former weight 95 to 100 pounds; present 155-160 pounds. Accompanying this has been a feeling of constant fatigue causing difficulty in doing housework. Cannot walk any distance without becoming short of breath and ankles swell with exertion. No loss of hair. Appetite excellent when not having an attack of vomiting and headache. Very thirsty. Marked frequency of urination for past 8 to 10 years with nocturia (8-10 times).

Has consulted numerous doctors, but only one has ever helped her to any extent. About four years ago she was placed on a strict diet and received several treatments for an "ulceration of the bowels", when the doctor cauterized through a sigmoidoscope. Following this she gradually lost weight and felt very much better. Her weight at one time was as low as 126 pounds. Soon returned to careless diet and weight increased again. Has not been troubled with attacks of vomiting and headaches for almost a year before present illness.

Menstrual history negative except that menses have been scant since pelvic operation in 1930. First baby born 20 years ago with difficulty; no laceration; child living and well. Second child still-born full term, 12 years ago. Patient vomited excessively all during that pregnancy, worse as term approached. Labor short. Very anemic during latter months of pregnancy and in poor condition.

Family History.—Neurotic trend marked in father and brother. Father always became nauseated and vomited at the sight of any food distasteful to him and brother did the same. Mother died at age of 37 of tuberculosis.

Physical Examination.—Temperature 100°F. Pulse 90; respiration 16; blood pressure 90/60. Well nourished, obese, age apparent; appears acutely ill. Wide interpupillary space and stature is of the short, stocky type. Obesity well distributed. Normal distribution of hair with no alopecia. Breath foul; tongue coated. Heart sounds regular but weak; some enlargement to left. Pitting edema of both ankles. Fingers short and stubby but have normal length relationship. Movement of extremities normal.

Laboratory Data.—Leukocytes 13,000; small lymphocytes 25; large lymphocytes 23; polymorphonutrophils 52; no malaria found; coagulation time 4 minutes 45 seconds; bleeding time 1 minute 30 seconds; platelet count 196,000; blood urea nitrogen 11.68 milligrams per 100 cc.; creatinin, 2 milligrams; sugar 95 milligrams; calcium 15 milligrams. Urine showed marked trace of acetone.

Basal metabolism: March 21—DuBois standard

+ 2; Harris-Benedict standard + 4; March 25—Du-Bois standard + 9; Harris-Benedict standard + 10.

Electrocardiograms show suggestive coronary change.

Roentgenographic examinations of gallbladder with dye show a large well filled gallbladder; of skull, normal sella turcica; of teeth first right upper bicuspid dead and condemned.

Course.—During the first three days in the hospital, patient was quite restless and would vomit all liquid or food given, necessitating glucose solution by vein daily and sedatives for the restlessness. Improvement was rapid after the fourth day and patient complained only occasionally of headache or nausea. All urine specimens were negative except for a trace of bile on the sixth day.

CLINICAL STAFF MEETING OF THE BAPTIST HOSPITAL

The monthly meeting of the Clinical Staff of the Southern Baptist Hospital was held Tuesday, March 28, 1933, with Dr. H. W. E. Walther, Chairman, presiding.

Following a brief business session two cases were presented.

Dr. Morrell W. Miller presented a case of "Staphylococcal Septicemia", occurring in a white male 27 years of age, one week after a three day seizure of influenza. On admission patient complained of generalized body aches, his temperature was 105°, and pulse 100. The following morning patient complained of severe pain in the index finger and thumb of the left hand. These digits became swollen and very painful and of a deep blue color. On the third day large erythematous nodules appeared on the right arm and leg, later appearing on all four extremities. On this day the blood culture showed *Staphylococcus aureus*. The blood remained the same. (WBC 7,000; polymorphonuclears 65). Agglutinations with the typhoid and brucella groups were negative. Urine and Wassermann negative. The last erythematous nodule to appear persisted, gradually increased in size, and was finally aspirated and the hazy serous fluid removed showed *Staphylococcus aureus*. Also the sanguinous fluid removed after excising the digits showed *Staphylococcus aureus*. At no time was there any evidence of involvement of the kidneys, heart, liver, lungs, or spleen. Treatment was largely supportive with sodium salicylate a grain per pound per day. Patient has returned to work again. One knee, however, has remained stiff.

Dr. Robert M. Willoughby in a discussion of the case stated that in his experience with such cases he had obtained the best results with blood transfusions.

Dr. E. Z. Browne presented a case of "Surgical Diabetes" occurring in a white male 53 years of

age. In his discussion of the disease generally Dr. Browne gave some interesting statistics on the mortality in diabetics with surgical infection prior to and following the introduction of insulin. Dr. Browne pointed out that the risk in the diabetic patient occurs not in connection with the actual procedure, so much, but arises as the result of untoward post-operative complications and sequelae; that such complications occasionally occur now but probably three-fourths of these deaths from complications such as acidosis, coma, embolism, pneumonia, etc., can be prevented by the use of proper pre-operative and post-operative treatment.

Dr. Allan Eustis gave a very interesting discussion in connection with Dr. Browne's case on the use of insulin in the pre-operative and post-operative treatment of surgical diabetes. He also commended Dr. Browne on not being afraid to use infusions of glucose in the treatment of these cases.

The meeting adjourned to meet again on Tuesday, April 25th, at 8:00 o'clock.

CHARITY HOSPITAL MEDICAL STAFF MEETING

The Medical Staff of Charity Hospital held its monthly meeting on April 18, 1933, at 8:00 P. M., under the Chairmanship of Dr. Giles.

Dr. D. O. Wright presented a case of nephritis in a 17-year-old girl. The etiology in this case was undetermined. She was the tenth of eleven siblings, the interesting thing being that the eighth, ninth, tenth, and eleventh siblings all had had nephritis at approximately the same age. Two of these are dead.

Dr. Monte presented the eleventh sibling of the family, a boy of 15 years of age, with 43 per cent albumin in the urine on admission. Dr. Monte also presented a case of post-partial nephritis.

These cases were discussed by Drs. Bethea, Jones, and Shushan.

A case of lung abscess was then presented by Dr. Monte and discussed by Drs. Durel and Heninger.

Dr. Gardberg presented a case, of which the probable diagnosis of mediastinal and mesentery Hodgkin's disease with cord lesions had been made. The case was discussed by Drs. Otis, Jones and Levin.

Dr. Bradley presented a case which had a mass in the upper left abdominal quadrant. In spite of all means of investigation the nature of this mass was undetermined. The case was discussed by Dr. Heninger.

Dr. Jones presented a case of acute symptomatic purpura. Discussed by Dr. Turner.

A very unusual case of hypoglycemic coma was presented by Dr. Hull. This case had been very ex-

cellently worked up and prepared. It was discussed by Drs. Sullivan and Turner.

Willard R. Wirth, M. D.

TOURO INFIRMARY

The regular monthly meeting of the Touro Infirmary Medical Staff was held Wednesday, April 12, 1933, at 8:00 P. M., with Dr. I. I. Lemann, Chairman, presiding.

The first order of business was a communication from a special committee notifying the staff that a Special Therapy Clinic was to be established in conjunction with the Out-Patient Department of Touro, which clinic was to administer all intravenous, intramuscular, and subcutaneous therapy on prescription from the referring clinic.

Dr. Allan Eustis and Dr. John Rodick presented a patient in whom the diagnosis of aneurysm of the pulmonary artery had been made eleven years ago. The patient was doing very well and the roentgenogram showed the aneurysm to be considerably filled with a laminated clot. This presentation was discussed at considerable length by Dr. Rudolph Matas, who spoke on the occurrence, signs and symptoms, and differential diagnosis of this rather unusual condition. He mentioned that a review of the literature had shown that there has been only one authenticated case in which the diagnosis was made ante mortem.

Dr. B. R. Heninger presented a record and autopsy specimen of a patient who had had a thoracic aneurysm and had been under continuous observation for ten years. This patient was discussed by Drs. Holbrook, Lemann, Rives, Eustis, and Matas.

Dr. Alton Ochsner discussed two unusual cases, one a recurrent intussusception due to an inverted Meckel's diverticulum, and the other a meningioma originating in the olfactory groove.

Dr. Rives, Chairman of the Program Committee, presented several case records for discussion by the staff.

Willard R. Wirth, M. D.

HOTEL DIEU

The regular monthly meeting of Hotel Dieu Medical Staff was held on Monday, March 20, 1933, at eight o'clock P. M., with the President, Dr. P. L. Thibaut, in the Chair, and the Secretary, Dr. Ruth Aleman, at the desk.

Dr. H. Theodore Simon gave an illustrated talk on "Some Phases in the Treatment of Fractures of the Long Bones", emphasizing: (a) Emergency first-aid treatment; (b) Closed or open (operative) reduction of displaced fragments as soon as possible; (c) Maintenance of reduction; (d) Post-healing treatment by braces and various forms of physical therapy.

Lantern slides illustrated the following: (a) Thomas splints for first-aid treatment, which

should be part of the equipment of every ambulance. (These are applied immediately at the site of the injury; thus the patient is admitted with the limb in traction and without additional injury to the soft parts.) (b) The correct method of applying skin traction; (c) Skeletal traction by two methods, the Steinman pin, and the Kirschner wire traction apparatus; (d) Drawings of fractured bones illustrating the pull of the muscles causing displacement of fragments; (e) The practical application of skin and skeletal traction, with photographs of cases.

Dr. O. C. Cassegrain: In no single surgical entity is treatment more improperly given than in the handling of fractures. Simple fractures of leg and forearm may be treated by the average medical man; but in fractures of the femur and the humerus, and especially of the spine, it takes a man with special training to get good results.

Dr. J. T. Nix reported a case of "Spontaneous Rupture of the Gall Bladder". The patient, when first seen by Dr. Perret, was diagnosed as acute gall bladder with probable rupture. The entire abdomen was rigid as a board, the rigidity more marked in the upper half. Patient was desperately ill and profoundly shocked. Morphine gave no relief. Dr. Louis Levy saw her in consultation.

She was operated upon, under spinal analgesia. Since the patient was rather obese, a transverse incision in the upper abdomen was used, following the costal border. The cavity was full of bile. The gall bladder was not tense, but it contained two stones; its mucosa was deeply engorged. Even though no rupture was visible, a puncture was suspected near the cystic duct. After inserting the hand into the pelvis, a stab wound was made over this region, and about 5 oz. of bile recovered. Post-operative treatment was that for acutely ill patients. She had a hard fight, but now (two weeks after the operation) is certainly on the road to recovery.

Dr. Louis Levy: I saw this case in consultation; it demonstrates how sick a patient can be and still recover. The abdomen was certainly an acute surgical one; yet by exercising great care in operating, the patient was saved. The case emphasizes also the value of drainage of the pelvis. In another case where the duct was not drained following cholecystectomy, the abdomen began to distend about the ninth day and, when re-opened, contained more than two quarts of bile; this shows how much bile can accumulate in a short time.

Dr. Lucien Fortier: X-rays are very valuable in demonstrating free air in the peritoneum. With the patient sitting upright, you can take a film of the upper abdomen; or you can turn her on one side with the film behind, and make the exposure. Air will always rise toward the ceiling. This demonstration of air is really quite simple.

Dr. P. B. Salatick: In cases of this kind, generally the patients are sick for 24 hours while the gangrene sets in, and then the gall bladder ruptures. The sudden onset in this case is unusual. Was the gall bladder thickened, showing signs of chronic disease, or were there signs of impending gangrene?

Dr. Nix, in closing, said: I did not find as badly a diseased gall bladder, apparently, as I had expected. The walls were not thickened; it contained just three or four small sharp stones. It is an acute condition in which vomiting will cause a sharp stone to puncture the gall bladder.

Dr. Maurice Gelpi presented a case of "Tumor of the Kidney Pelvis", as follows: Patient was 54 years old, with a complaint of sudden severe attack of painless hematuria, which recurred. The problem was to determine the location of the bleeding. After several examinations, cystoscopies, pyelograms and laboratory tests, we determined definitely that the origin was in the left kidney, and even localized it in the kidney pelvis. Pyelograms made us feel that the shadow in the kidney pelvis was not that of a stone; also these pyelograms did not show the characteristic flattening out of the pelvis and of the calices, such as is found in a tumor involving a large portion of the kidney. While this tumor was later found to involve a portion of the kidney itself, the diagnosis was made on that portion of the tumor filling the kidney pelvis, like a papilloma.

We removed this rather early tumor, using spinal anesthesia, which was of immense assistance. Oxygen used in the course of the spinal has definite value; the originator of this idea feels that during spinal analgesia, there is limitation of the diaphragmatic excursion, resulting in shallow respiration, and the patient therefore suffers from a shortage of oxygen. This causes pallor and weakness, which are absent when oxygen is used during the operation.

Dr. M. Couret demonstrated the actual specimen, also a drawing of the tissue by Dr. Aldea Maher, and the microscopic slides of the tissue.

Dr. J. E. Landry: I assisted Dr. Gelpi in this case. What struck me forcibly was the nicety with which he made the diagnosis of the location of the tumor. In the operation, there was wonderful relaxation. We pulled the kidney out of the abdomen, made a cross-sling, one under each pole, and pulled them up very easily, making tension on the kidney. In this way the whole structure of the kidney was brought into view. Four or five inches of ureter was excised with the kidney.

Dr. A. Mattes: During my practice of urology, I have had difficulty in convincing not only the patient's family, but certain physicians who were relatives of the patient as to the accuracy of diagnosis of such tumors. X-ray pictures in these cases

are almost conclusive; with the serial plates you can make a diagnosis of the type of tumor even when the tumor is only the size of a pea. This is particularly applicable to papillomata. In the presence of blood clots in the kidney, incorrect diagnosis is possible and, as many conditions may give rise to hematuria, the presence of blood clots should be borne in mind.

Dr. M. Couret: There never was a diagnosis of papilloma made histologically on this case. It was diagnosed as "Probable Papilloma" with the X-ray. Histologically, it is definitely not a hypernephroma, because these do not occur at the middle of a kidney; they occur at the upper pole. In regard to metastasis in this case, I do not believe that there was any found at the time of operation. With tumors of an adrenal origin, metastasis frequently occurs, but certainly not with the regularity as to other malignant tumors.

Dr. Gelpi, closing, said: The pathological specimen showed this to be an adrenal tumor and not a primary papilloma of the pelvis. However, as I illustrated in the demonstration of both the gross and microscopic specimens, we were not dealing with a hypernephroma, but with a tumor evidently originating in an adrenal rest. Dr. Couret will bear me out in this connection.

MERCY HOSPITAL

The regular monthly meeting of the Mercy Hospital Staff was called to order Friday, March 17, 1933 at 8 P. M. by Dr. Frank J. Chalaron, President of the Staff, presiding. The Secretary read the Hospital Analysis Sheet and Laboratory Sheet which was ordered filed.

Committee Reports:—Report made of unfinished meeting of the committee to Amend the Constitution and By-Laws.

Communications read on applications from the outside for internships, ordered filed.

Moved by Dr. Hauser and seconded by Dr. Throescher that applications for membership to the Staff of Drs. Watson, Sharp, and Unsworth, be referred to the Executive Committee for action. Carried.

Reports by Death and Record Committee:

Read by the Chairman:

Case 1. Broncho—Pneumonia following removal of Fibroids—Toxemia.

Case 2. Toxic Degeneration of Liver, Ascites, Primary Malignancy of Liver—Circulatory Failure. Discussed by Dr. Randolph Lyons. Discussion by Chairman on this case that records should be correctly kept and should be up to date, as this seems to be the trouble more or less in all hospitals, records are more or less incomplete, when a case is brought up for discussion.

Case 3. Acute Appendicitis (ruptured), General Peritonitis with Shock. Complete Autopsy.

Scientific Session. A very interesting paper was then read by Dr. R. A. Robinson. Subject—Agranulocythemia.

Patient was an inmate of the hospital, and was completely autopsied. The case was discussed by Dr. Hauser who performed the autopsy, also laboratory findings.

Discussion by Dr. Irwin—Reported having seen it in adults, but first heard of it in children, as rule has found slough in throat; mostly pyocyamus History as a rule, is that of an injury preceeding sickness, Mortality high.

Discussion by Dr. R. Lyons—Unusual, experience also in adults, as a rule over 16 years, this case

was young, age 4 yrs. Treatment:—In mouth lesions treat the mouth; repeated blood transfusions, other drug stimulants to cells and bone marrow. In severe cases Pentose Nucleotide K.86-o.7 grams twice daily intramuscularly. If bone marrow is not to damaged or suppressed may try and stimulate growth and help out.

The following answered to roll call, Dr. Chalaron; Kirn, Battalora, Hauser, Throescher, Richaud, Watson, Tessitore, Brown, Davison, Dimitry, Robinson, Lyons, Steib, Gould, Irwin, Zander, Upton, Gooch, Daboval, Tardo, Mailhes, Leckert.

Frank J. Chalaron, M.D., Chairman.

Theo. F. Kirn, M.D., Secretary.

TRANSACTIONS OF ORLEANS PARISH MEDICAL SOCIETY

CALENDAR

May 1—Eye, Ear, Nose and Throat Hospital Staff, 8 P. M.

May 3—Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

May 5—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

May 5—Physiology Seminar, Tulane Medical School, 5 P. M.

May 8—ORLEANS PARISH MEDICAL SOCIETY, 8 P. M.

May 10—Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

May 10—Touro Infirmary Staff, 8 P. M.

May 12—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

May 12—Physiology Seminar, Tulane Medical School, 5 P. M.

May 12—French Hospital Staff, 8 P. M.

May 15—Hotel Dieu Staff, 8 P. M.

May 16—Charity Hospital Medical Staff, 8 P. M.

May 17—Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

May 17—Charity Hospital Surgical Staff.

May 18—Eye, Ear, Nose and Throat Club, 8 P. M.

May 19—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

May 19—I. C. R. R. Hospital Staff, 12 Noon.

May 19—Physiology Seminar, Tulane Medical School, 5 P. M.

May 19—Mercy Hospital Staff, 8 P. M.

May 22—ORLEANS PARISH MEDICAL SOCIETY, 8 P. M.

May 23—Baptist Hospital Staff, 8 P. M.

May 24—Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

May 26—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

May 26—Physiology Seminar, Tulane Medical School, 5 P. M.

May 31—Clinico-Pathological Conference, Touro Infirmary, 10:30 A. M. to 11:30 A. M.

During the month of April, besides the regular meeting of the Board of Directors, the Society held but one meeting. The second meeting scheduled for April 24 was dispensed with because of conflict with the meeting of the House of Delegates of the Louisiana State Medical Society.

At the meeting held April 10, the following papers were read:

Surgical Parotitis with report of a Case Complicating Tonsillectomy—By Dr. A. A. Keller.

Discussed by Dr. J. J. Ryan.

Diagnosis and Treatment of the Enlarged Thy-mus—By Dr. Roy E. de la Houssaye.

A New Syringe Method for Blood Transfusion—By Drs. Michael E. DeBaKey and Wm. A. Gillentine.

Discussed by Dr. Alton Ochsner.

Following the scientific session the Society went into executive session and the reports of officers, special and standing committees for the first quarter, 1933, were read and adopted.

The following resolutions were unanimously adopted:

DR. GEORGE F. COCKER

Dr. George F. Cocker died February 12, 1933, after an illness of several weeks. Although a native of Brenham, Texas, he came to New Orleans in his early youth. He attended the city public and high schools and later Tulane University Medical School from which he graduated in 1898.

Dr. Cocker was physician to the German Protestant Home for the Aged for over twenty years. His daily visits to the Home and his untiring care of the inmates makes his death a great loss to this institution and a real sorrow to the aged and infirm.

Dr. Cocker was an active worker in the 14th Ward Civic League, having held numerous offices in this organization. He was a member of the Orleans Parish Medical Society, Louisiana State Medical Society, Southern Medical Association, and the American Medical Association. He is survived by his widow, the former Miss Florence Albers, three sisters and one brother.

DR. A. C. KING

Alfred Clinton King was born at Mounds, Louisiana, in Madison Parish, on December 17, 1868. His education was received in private schools. In 1891 he matriculated in the Tulane Medical School. From that date Dr. King devoted his time and energies to his studies. Of a quiet but genial disposition, he was always a favorite among his classmates. Through his college years, as well as during his internships at Touro Infirmary and Charity Hospital, he enjoyed the reputation of being always dependable; a promise made was a promise kept. Whatever he undertook to do was well done. He loved his work and found it most interesting, the secret of his success. His patients were his special charges. He knew no distinction of caste or social standing; no one was ever refused attention for lack of means. By his devotion to his work he soon acquired a large and lucrative practice in the town of Algiers, where he settled in 1895, immediately after finishing his internship at Charity Hospital.

In 1911 Dr. King joined the surgical staff of the Charity Hospital and was at once made assistant to the Chair of Surgery in the Tulane Post Graduate School of Medicine; in 1921 he was appointed senior visiting surgeon on the hospital staff, and in 1932 was elected head of the Surgical Department to the Chair of Surgery in the Post Graduate School. At the death of Dr. Henry Daspit, Dean of the Graduate School, the position was offered Dr. King, but being in frail health he feared he could not give the time and energy required and decided to refuse the offer.

Dr. King was a good surgeon and being of a mechanical turn, he devoted such time to the study and treatment of fractures, and through his efforts added much to the armamentarium of this specialty. He had a very large and a most complete assortment of slides on fractures, collected for the benefit of his classes.

No man in the profession enjoyed a better reputation; ethical to a fault; a friend to all.

Dr. King was a fellow of the American College of Surgeons; a member of the American Medical Association, Southern Medical Association, Louisiana State Medical Society and Orleans Parish Medical Society; a member of the visiting staff of the Charity Hospital and Hotel Dieu.

He loved beautiful things. His home was ideal.

He is survived by his widow, who was Miss Minnie Thomson of Delhi, Louisiana. The large attendance at his funeral of both the medical profession and his patients, was a testimonial to the love and esteem in which he was held.

During the past month our Secretary, Dr. Frederick L. Fenno, has been ill. We hope that he will soon be back on the job again.

Outside of routine duties, the Secretary's office has not been very busy during April.

TREASURER'S REPORT

ACTUAL BOOK BALANCE: 2/27/33	\$2,320.75
Receipts	1,413.04
	<hr/>
	\$3,733.79
Expenditures	1,017.29
	<hr/>
ACTUAL BOOK BALANCE: 3/30/33	\$2,716.50

LIBRARIAN'S REPORT

One hundred and forty volumes have been added to the Library during March. Of these 11 were received by purchase, 77 by gift, 40 by binding, and 12 from the New Orleans Medical and Surgical Journal. A notation of new titles of recent date is given below.

In addition to everyday calls for particular titles and for material which could be furnished at once, references have been collected on the following subjects:

- Transillumination of the breast.
- Thrombo-angitis obliterans.
- Raynaud's disease.
- Bone sarcoma.
- Zsigmondy's work on colloidal chemistry.
- Dietetic blood building.
- Differential diagnosis of concussion of brain, cannabis intoxication and alcoholism.
- Methylene blue in carbon monoxide poisoning.
- Incidence of fracture of astragalus.
- Etiology of liver abscess.
- Treatment of amebic dysentery.
- Material for talk to mothers on congenital syphilis.
- Call to determine date of death of prominent psychiatrist of Boston.
- Raynaud's disease complicated by pernicious anemia.
- Mechanism of skin reactions.
- Call to distinguish between various types of "sticking plaster" in French language.
- Injection treatment of hemorrhoids.
- Medico-legal aspects of lead poisoning.
- Surgical treatment of subdeltoid bursitis.
- Action of digitalis in rheumatic heart disease.

Treatment of neuralgia.
 Bacterial allergy.
 Factors in the causation of edema.
 Zeroderma pigmentosum.

NEW BOOKS

Source book v. 1-10. 1932.
 Woodward, W. C. ed. Medico-legal cases. 1926-30.
 Hower, C. L.—Recent advances in anesthesia and analgesia. 1932.
 Thoms, Herbert—Chapters in American Obstetrics. 1933.
 Robinson, Victor—Syllabus of Medical History. 1933.
 Johannessohn, Frits—Chinin. 1932.
 American Child Hygiene Association—Transactions. 1920.
 Mexico—Public Health Department—Memorias. 1931-32.
 Hutton, I. H.—Sex Technique in Marriage. 1932.
 White House Conference—Body Mechanics. 1932.

White House Conference—Growth and Development of the Child. 1932.

White House Conference—Psychology and Psychiatry. 1932.

Lepontre, C.—La pyelographie intravenieuse. 1932.

Coffey, R. C.—Transplantation of Ureters into large Intestines. 1932.

Bell, W. B.—Ovarian Neoplasms. 1932

Allen, Edgar—Sex and Internal Secretions. 1920.

Cutter, I. S.—School of Medicine. 1930.

Mississippi State Medical Association—Transactions. 1920.

Association of American Physicians—Transactions. 1920.

American Therapeutic Society—Transactions. 1921.

Rockefeller Foundation—Review for 1921, 1922, 1923, 1924.

Edward L. King, M. D.,
 President.

LOUISIANA STATE MEDICAL SOCIETY NEWS



DR. ROY B. HARRISON,

Retiring President

Louisiana State Medical Society

THE MEETING OF THE HOUSE OF DELEGATES OF THE LOUISIANA STATE MEDICAL SOCIETY

The House of Delegates of the Louisiana State Medical Society will meet Monday, April 24, in the Green Room of the Tulane Medical School, and will be called to order by the President, Dr. Roy B. Harrison. Following the business session a banquet was to be held for the Past Presidents and the delegates. The details of the meeting and the various reports will be published in the June number of the Journal, as the present number had already gone to press when the meeting was in session.

DR. KOSTMAYER APPOINTED DEAN OF THE GRADUATE SCHOOL OF TULANE

It is with pleasure that we have learned that Dr. Hiram W. Kostmayer, Chairman of the Journal Committee, has been appointed Dean of the Graduate School of Tulane University of Louisiana. Dr. Kostmayer is well known throughout the State and the South through his connection with organized medicine and the Graduate School of Tulane. Dr. Kostmayer has been a member of the House of Delegates of the Louisiana State Medical Society for some years, and in 1923 he was President of the Orleans Parish Medical Society. He was a teacher in Tulane from 1909 to 1916. From 1916 to 1924 he was Professor of Gynecology in the Loyola Post Graduate School. In 1925 he became Professor of Clinical Obstetrics and Clinical Gynecology in the Graduate School of Tulane, and since 1928 he has been Professor and Head of the Department of Gynecology. Dr. Kostmayer is well qualified to act as Dean of the Graduate School. He is a man of splendid character, of force, and one who has made a name for himself in scientific gynecology. He is one of the four men in New Orleans who passed the Obstetrical and Gynecological Board without examination. He has been for some years a Fellow of the American College of Surgeons, as well as a member of half a dozen or more special gynecological organizations.

THIRD DISTRICT MEDICAL SOCIETY

A meeting of the Third District Medical Society was held in New Iberia on March 9 with the following program:

"A Crippled Hand", by Dr. Isidore Cohn, New Orleans, La.

"Functional Amenorrhea and Dysmenorrhea and its Treatment", by Dr. Lucien LeDoux, New Orleans, La.

"Angina Pectoris", by Dr. A. E. Fossier, New Orleans, La.

Dr. L. B. Long of Lafayette was elected delegate, and Dr. P. H. Fleming of St. Martinville, alternate.

SIXTH DISTRICT MEDICAL SOCIETY

The Sixth District Medical Society was held at the Baton Rouge General Hospital, Thursday,

March 30. Dr. Glenn J. Smith was selected to succeed Dr. Lester J. Williams of Baton Rouge as President of the organization. Dr. Smith is head of the East Louisiana Hospital at Jackson. Dr. Cecil Lorio was unanimously re-elected Secretary, and Dr. Clarence Lorio the delegate from the Sixth District to meet in the House of Delegates in New Orleans, April 24. The Vice-Presidents who will represent the various parishes in the district are as follows: Dr. F. H. Hanson, Donaldsonville, Ascension; Dr. Guy Darcantel, White Castle, Iberville; Dr. H. W. A. Lee, Baton Rouge, East Baton Rouge; Dr. Paul B. Landry, Port Allen, West Baton Rouge; Dr. C. S. Miller, Jackson, East Feliciana; Dr. C. C. Blakeney, St. Francisville, West Feliciana; Dr. M. O. Becnel, New Roads, Pointe Coupee; Dr. E. E. Lafferty, Bogalusa, Washington; Dr. John Griffith, Slidell, St. Tammany; Dr. L. D. McGehee, Hammond, Tangipahoa; Dr. V. J. Gautreaux, Albany, Livingston; Dr. H. A. Tynes, Grangeville.

The meeting was addressed by Dr. Roy B. Harrison, President of the Louisiana State Medical Society, and Dr. C. A. Weiss, President-Elect of the Louisiana State Medical Society, whose address was entitled "The Advantages of Affiliation with Medical Societies." The detailed scientific program of the morning session included an address by Dr. S. C. Barrow, Past President of the Louisiana State Medical Society, who spoke on the subject of "Radiation Therapy with Special Reference to Surface Lesions." Dr. A. A. Herold, likewise a Past President of the State Society, spoke on "Recent Advances in the Study of Diabetes Mellitus," and Dr. J. Q. Graves of Monroe discussed "The Prevention of Peritoneal Adhesions." Luncheon was served at the Baton Rouge General Hospital. There were present about fifty physicians from the Sixth District.

MADISON, EAST CARROLL, AND WEST CARROLL TRI-PARISH MEDICAL SOCIETY

The Tri-Parish Medical Society held its regular monthly meeting in Oak Grove, Tuesday, April 4, at 7:30 P. M. in the Holland Hotel. The following physicians were present at this meeting: Doctors W. H. Hamley, Lake Providence; G. W. Gaines, Tallulah; W. McG. Dollerhide, Oak Grove; E. D. Butler, Oak Grove; E. O. Edgerton, Tallulah; E. S. Freeman, Tallulah; L. A. Masterson, Oak Grove; B. T. Ferguson, Waverly; B. L. Bailey, Epps; J. Preston Davis, Lake Providence; W. K. Evans, Lake Providence; B. C. Abernathy, Soudheimer.

A very interesting scientific program was rendered, "Influenza" being the main topic of discussion. Dr. W. K. Evans of Lake Providence presented a paper on "The Symptoms, Diagnosis and Treatment of Influenza". Dr. Evans' paper was

discussed by Doctor Gaines of Tallulah. Dr. E. L. Bailey of Epps presented a paper on "The Complications of Influenza Involving the Respiratory Tract". Dr. Bailey's paper was discussed by Doctors Hamley, Masterson, Gaines and Davis. Dr. E. D. Butler of Oak Grove presented a paper on "Intestinal Obstructions", which was discussed by Dr. Gaines. The next meeting of the Society will be held in Lake Providence on Tuesday, May 2, at 7:30 P. M.

The following resolution was adopted unanimously by the Society:

Whereas, the Parish Health Units of East Carroll, West Carroll, and Madison Parishes are furnishing economically and effectively a most vital service to both the laymen and Physicians of the aforementioned parishes, and;

Whereas, we consider it essential that these services be continued unimpaired, therefore;

Be it resolved that this Tri-Parish Medical Society, consisting of East Carroll, West Carroll, and Madison Parishes go on record as endorsing the Health programs being instituted by the Health Units of the aforementioned Parishes, and;

Be it resolved, that we endorse unqualifiedly the continued operation of these Health Units and the programs now being carried on by them, and;

Be it further resolved, that one copy of this resolution be spread upon the minutes of this Society, that one copy be submitted to the official Parish Organ of each constituent Parish for publication, and that one copy be submitted to Dr. J. A. O'Hara, President of the Louisiana State Board of Health.

William H. Hamley, M. D.,
President, Tri-Parish Medical Society.
G. Douglas Williams, M. D.,
Secretary, Tri-parish Medical Society.

EAST AND WEST FELICIANA BI-PARISH MEDICAL SOCIETY

The Bi-Parish Medical Society met with Dr. Glenn J. Smith and Staff in the East Louisiana State Hospital. Our Secretary was instructed to write the State Secretary that we endorse action of the State Society in cancelling the State Meeting in Lake Charles.

Scientific Program: Dr. C. A. Weiss, Jr. read a paper on "Diphtheria," which was freely and favorably discussed by members present. Drs. C. S. Miller and W. E. Wilkinson presented interesting Clinical Cases. On motion votes of thanks were extended Drs. Weiss, Miller and Wilkinson for the presentation of their papers and clinical cases. There was also a vote of thanks to Misses Roby and Bonds for their assistance in the clinical cases.

The Society will hold its next meeting in the East Louisiana State Hospital the first Wednesday in June, at 7:30 P. M.

E. M. Robards, President.
E. M. Toler, Secretary.

APPROACHING MEETINGS

The annual meeting of the American Medical Association will be held in Milwaukee, June 12-16.

The Scientific Session of the American Heart Association will be held on Tuesday, June 13, 1933, from 9:30 to 5:30 P. M. in the Knickerbocker Hotel, Milwaukee, Wisconsin.

U. S. PUBLIC HEALTH SERVICE

Medical Director L. L. Lumsden was directed to proceed from New Orleans to Biloxi, Gulfport, Jackson, Vicksburg and Natchez, Miss. and return, to inspect Service stations and activities at those places.

Surgeon O. E. Denney was directed by Surgeon General Cumming to proceed from Carville to Washington, D. C. for conference in connection with leprosy research work. Surgeon Denney was also directed to proceed to Jacksonville, Miami, and Key West and other points in Florida for conference relative to diagnosis of patients.

Past Assistant Surgeon F. N. Shipp has been relieved from duty at New London, Conn. and assigned to duty at the Marine Hospital, New Orleans.

Assistant Surgeon A. H. Deibert has been relieved from duty at New Orleans and assigned to duty at the Penitentiary, Atlanta, Georgia.

A Board was convened in New Orleans to examine Assistant Surgeons for promotions. This Board consisted of Surgeon T. B. H. Anderson, Surgeon W. Y. Hollingsworth, and Passed Assistant Surgeon G. H. Faget.

HEALTH OF NEW ORLEANS

The Department of Commerce, Bureau of Census, reported for the week ending March 18, a death rate in New Orleans of 16.0, brought about by the death of 148 individuals, 93 of whom were white, and 55 colored. The infant mortality rate was only 34. The succeeding week, ending March 25, the rate was somewhat higher, being 17.3 for the total population, 14.5 in the white and 24.3 in the colored, as a result of 160 deaths, divided white 95 and colored 65. The infant mortality rate was still low. For the fourteenth week in the year, ending April 1, there was quite a drop in the rate, which was 15.1. There were 139 deaths reported, being 86 white and 53 colored, with a rate respectively of 13.1 and 19.8. The infant mortality rate was 73, practically equally divided between the white and negro races. For the week ending April 8, there was a slight decrease in the death rate,

the rate being 14.7 for the total deaths of 136, divided white 86, rate 13.1, and colored 50, rate 18.7. The infant mortality rate was 90, due very largely to a high negro infant mortality rate. So far this year for the first fourteen weeks the death rate has been 16.5, as contrasted to the corresponding period in 1932 of 16.0.

INFECTIOUS DISEASES IN LOUISIANA

Dr. J. A. O'Hara, Epidemiologist for the State of Louisiana, reports the following diseases occurring in double figures for the week of March 18: Fifty-six cases of measles, 46 of gonorrhea, 44 of pulmonary tuberculosis, 43 of syphilis, 27 of whooping cough, 16 of typhoid fever, 15 of cancer, 12 of diphtheria, 20 of pneumonia, and 19 of scarlet fever. There were also reported during this week 2 cases of small pox, and 5 cases of cerebrospinal meningitis from the Parish of Orleans. Of the 16 cases of typhoid fever, 14 occurred in Terrebonne Parish. For the week ending March 25, there were listed 85 cases of syphilis, 48 of gonorrhea, 33 of influenza, 31 of measles, 29 of pneumonia, 23 of tuberculosis, 20 of whooping cough, 17 of typhoid and cancer, and 11 of scarlet fever. Typhoid fever this week was reported in only 6 instances, these cases coming from the Parish of Iberia, Lafourche, Rapides, and Sabine. Orleans Parish reported 1 case of meningitis, 1 of undulant fever, and Lafourche Parish reported 1 of leprosy. For the week ending April 1, as like last year, in this year the corresponding week there were reported a large number of cases of measles, 104 from throughout the State. There were also reported 39 instances of syphilis, 35 of whooping cough, 22 of pneumonia, 20 of typhoid fever, 16 of

gonorrhea, 15 of scarlet fever, 16 of pulmonary tuberculosis, and 11 each of influenza and chicken pox. The typhoid fever cases came from various parishes throughout the State, each reporting 1 except Terrebonne Parish where 14 cases were listed, also 1 of para-typhoid fever. Three cases of tularemia were reported, 1 of undulant fever, and 1 of epidemic cerebrospinal meningitis. For the fourteenth week of the year ending April 8, measles cases had dropped to only 29. There were also reported the following cases: Fifty-three of syphilis, 33 of whooping cough, 30 of pneumonia, 21 of typhoid fever, 24 of pulmonary, 15 each of influenza and gonorrhea, 19 of cancer, and 10 each of diphtheria and scarlet fever. The typhoid fever cases were again scattered throughout the State, with St. Landry Parish leading with 6, followed by Terrebonne Parish with 3. For the week ending April 15, very few cases of reportable diseases were listed. Measles was reported in 38 cases, 37 of pulmonary tuberculosis, 24 of influenza, 26 of pneumonia, 23 of whooping cough, 10 each of cancer and diphtheria.

OFFICERS OF THE PARISH SOCIETIES FOR THE YEAR 1933

DESOTO PARISH:

President: Dr. F. O. Brinkley, Gloster.
Vice-Pres.: Dr. H. P. Forsyth, Mansfield.
Sec.-Treas.: Dr. W. G. Jones, Mansfield.

ST. MARTIN PARISH:

President: Dr. J. L. Beyt, St. Martinville.
Vice-Pres.: Dr. E. L. St. Germain, Breau Bridge
Sec.-Treas.: Dr. P. H. Fleming, St. Martinville.
Delegate: Dr. E. L. St. Germain, Breau Bridge.
Alternate: Dr. P. H. Fleming, St. Martinville.

MISSISSIPPI STATE MEDICAL SOCIETY NEWS

SIXTY-SIXTH ANNUAL SESSION
MISSISSIPPI STATE MEDICAL ASSOCIATION
ROBERT E. LEE HOTEL, JACKSON,
MAY 9, 10, 11, 1933

THIRTIETH ANNUAL SESSION
HOUSE OF DELEGATES
MAY 9—8:00 A. M.

WOMAN'S AUXILIARY

This is the Convention Number of our Journal. It has been stated with authority that an ideal state journal should publish in advance of the annual meeting reports of all officers and committees together with resolutions and other matters of importance to be presented for action by the Association. The reason for this is obvious. All members of the Association, and especially the mem-

bers of the House of Delegates, are entitled to know what they are to be called upon to consider and decide. It is only through advance and mature thought that good judgment can be shown and the best interests of all served. Too often surprise matters "railroaded" through the House of Delegates at the last minute when many members have already left and others are anxious to get away, cause later regret. We are sorry that in spite of repeated requests, some reports are not yet available for publication in this number of our Journal.

This year's meeting of our Association is one of the most important in its history. The practice of medicine is at a crucial point. Action taken and decisions made in a number of matters to be considered will have a far reaching effect in the future. The officers chosen to guide the Association will perhaps have a harder task than any of their predecessors. Politics and political campaigns have

no place in an organization devoted and dedicated to high ideals.

Let's act according to the dictates of our hearts. May our votes be guided by an honest desire to serve the Association and the people of Mississippi. May we choose the best men as our leaders. We shall have no regrets. We shall then not be disappointed.

TENTATIVE PROGRAM OF MISSISSIPPI STATE MEDICAL ASSOCIATION

MAY 9-10-11, 1933

SECTION ON MEDICINE: A. H. Little, Oxford,
Chairman.

Symposium on Heart Disease:

The Etiology of Heart Disease.....

.....J. H. Musser, New Orleans

The Prognosis in Coronary Disease.....

.....L. J. Clark, Vicksburg

Urinary Antiseptics.....F. L. Van Alstine, Jackson

The Question of Prognosis.....

.....W. A. Dearman, Gulfport

Asphyxia Neonatorum.....F. G. Riley, Meridian

Neuritis Complicating Pregnancy.....

.....G. Y. Gillespie, Jr., Greenwood

Climacteric Hypertension.....

.....W. L. Stallworth, Columbus

RADIOLOGY: J. A. Beals, Greenville, Chairman.

The Early Diagnosis of Pulmonary Tuber-

culosis.....L. J. Menville, New Orleans

Dermatophytosis of Extremities: Its

Treatment by X-Ray Therapy.....

.....H. G. McCormick, Laurel

A Paper.....J. Rice Williams, Houston

SECTION OF SURGERY: V. B. Philot, Houston,
Chairman.

Newer Methods in the Treatment of Pro-
static Obstructions.....

.....Russell A. Hennessey, Memphis

Intestinal Obstruction.....A. G. Payne, Greenville

The Treatment of Chronic Osteomyelitis

With Live Maggots.....

.....R. J. Field, Centerville

Chronic Peptic Ulcer—W. H. Sutherland, Booneville

Some of the Surgical Aspects of Obstetrics

.....M. L. Flynt, Meridian

Spinal Anesthesia.....H. A. Whittington, Natchez

Cervical Obstructions.....W. F. Hand, Jackson

Carcinoma of the Colon.....M. Q. Ewing, Amory

SECTION ON EYE, EAR, NOSE AND THROAT

C. C. Buchanan, Hattiesburg, Chairman.

SPECIAL SESSION, WEDNESDAY, MAY 10, 1933

9:30 A. M. to 1:00 P. M.

1. Chairman's Address.

2. A Few Clinical Observations on Allergy from
the Otolaryngological Viewpoint.—Dr. Edley
H. Jones, Vicksburg.

Discussion opened by Drs. J. C. Pegues and
W. B. Dobson.

3. Evaluation of the Symptoms of Chronic Aural
Suppuration.—Dr. J. R. Hume, New Orleans.
Discussion opened by Drs. Robin Harris and
E. F. Howard.

4. Acute Sinusitis, Diagnosis and Treatment.—Dr.
L. S. Gaudet, Natchez.

Discussion to be opened by Drs. R. E. An-
derson and J. C. Adams.

5. Nasal Obstruction, Causes, Diagnosis and Treat-
ment.—Dr. Geo. E. Adkins, Jackson.

Discussion to be opened by Dr. C. A. Mc-
Williams and Dr. D. E. Staton.

6. Spontaneous Epistaxis.—Dr. D. C. Montgomery,
Greenville.

Discussion to be opened by Drs. A. G. Haga-
man and A. G. Touchstone.

7. Tuberculous Iritis.—Dr. B. S. Guyton, Oxford.

Discussion to be opened by Drs. A. G. Wilde
and H. R. Fairfax.

8. Conjunctivitis, Acute,—Diagnosis and Treat-
ment.—Dr. LeRoy Wilkins, Clarksdale.

Discussion to be opened by Drs. W. S. Sims,
and H. L. Arnold.

9. Cataract, Senile and Traumatic.—Dr. M. L. Bat-
son, Jackson.

Discussion to be opened by Drs. W. A. Ste-
vens and R. H. Pegram.

SECTION ON HYGIENE AND PUBLIC HEALTH
H. C. Ricks, Jackson, Chairman

1. The Practicing Physician In The Control of
Tuberculosis.

A. E. Keller, Associate Professor of Preven-
tive Medicine, Vanderbilt University, Nash-
ville, Tennessee.

Discussion to be opened by W. A. Toomer
and T. Paul Haney, Jr.

2. The Use Of Convalescent Serum In The Pre-
vention And Attenuation Of Measles.

Harvey Garrison, Jr., Jackson.

Discussion to be opened by Noel C. Womack,
R. H. Clark, and J. K. Bullock.

3. The Prevention Of Heart Disease Due To
Contagion

G. C. Terrell, Prentiss.

Discussion to be opened by T. E. Wilson and
J. S. Gatlin.

4. The Use Of The Laboratory In The Prevention
Of Disease,

A discussion of the factors which determine
the value of laboratory work.

T. W. Kemmerer, Jackson.

Discussion to be opened by Leon S. Lippin-
cott, and C. R. Stingily.

T. M. Dye,

Greenville,

Secretary.

April 10, 1933.

ECHOES FROM JACKSON

The Jackson doctors are looking forward with
great pleasure to the coming convention, and we

are confidently expecting a fine meeting, in spite of depressions, bank holidays, and what-have-you. We especially urge our country conferees to come. You won't lose much by leaving home for a few days now, and it will do you good to knock off and renew old friendships, get some new ideas, and new inspirations.

Dr. John Howell, president of the Central Medical Society, says, "Tell the boys we are awaiting their arrival with most pleasant anticipations. The members of the Central will all consider themselves a committee on reception, and are at your service for anything we can do to make your visit both pleasant and profitable."

Dr. Lawrence W. Long, chairman of the Arrangements Committee—"Everything is all set for the convention. Headquarters will be at the Robert E. Lee Hotel, where the whole twelfth floor will be ours for the Association meetings, and the mezzanine floor for the Auxiliary meetings. A special telephone with outside connections will be installed on the twelfth floor for the convenience of the doctors, and a special arrangement made for registration in case of expected calls. Other hotels are co-operating, and there will be no room charge for wives of doctors attending the convention with their husbands. We are expecting a great meeting."

Mrs. A. G. Wilde, president of the Woman's Auxiliary—"Please tell the doctors' wives that we are expecting a fine attendance at our auxiliary meetings, and are hoping to enroll many new members. We are planning some special features for their entertainment, but everything will be informal, and no one is expected to dress up. Street dress will be the order of the day. We are expecting a fine meeting."

Mr. M. B. Swayze of the Chamber of Commerce—"We would like to do something for the doctors to show our appreciation of the convention. We shall be happy to furnish cars and drivers for a ride around the city, out to the new asylum grounds, or anywhere else. Please let us serve you."

Mayor Scott—"We are glad to have the doctors again this year—and every year. Tell the boys the city is theirs for this convention. The traffic officers will be instructed to extend every courtesy to you, and if, by chance, you find your car tagged, just call Chief Simmons, and he will fix it for you. If any of the boys get mixed up as to just when the 18th Amendment was repealed, call me."

In fact, everybody seems just delighted to have the doctors with us again.

D. W. Jones.

Jackson,

April 11, 1933.

REPORTS OF OFFICERS

I PASS THE GAVEL

It is my great pleasure and desire, at this time, to express to the members of the Mississippi State

Medical Association my sincerest appreciation of the honor conferred upon me by election as president of a body of men representing the very highest principles and ideals. Words are inadequate to express feelings in the matter.

As my term of office is rapidly coming to an end, I am happy at the thoughts of turning the affairs of the office over to Dr. J. W. D. Dicks, one much more qualified than I, to manage and carry the Association forward. It has been a distinct pleasure to have been associated with him as president-elect, and now, as president for the coming year, I offer him my co-operation and best wishes. To our capable secretary, Dr. T. M. Dye, I wish to express my deepest gratitude for his many kindnesses as well as my appreciation for his most efficient work. I believe we have one of the best, if not the best, secretaries in the United States. It would be most ungrateful if I failed to recognize the very splendid work of the Mississippi Editor for the New Orleans Medical and Surgical Journal. My hat is off to Dr. L. S. Lippincott as the 100 per cent medical journal editor. To the other officers of the association I tender my sincerest thanks and best wishes.

During these times of economic distress our membership has been reduced. This has been a source of great regret and much concern to me. Although I have tried to carry on an active membership campaign throughout the year, I am sorry to report that our membership has fallen short of what it should be. The first duty of a doctor to himself as well as to his profession and clientele is to join his county medical society, thereby becoming a member of the State Association. The essence of our influence lies in our membership and its thorough organization. It behooves every doctor, especially at this time, to sacrifice here and there, if this sacrifice be necessary, in order that his dues be paid and his membership kept up. During the coming year my hope is that this will be done.

I am thoroughly sold on the community hospital. I know it to be the solution of the problem of caring for the state's indigent sick. Each county or each two or three counties should be served, as far as the indigent sick in those counties are concerned, by a community or county hospital. In my opinion the day is not far distant when this will be the case. I trust that it will. To the community hospital committee, appointed by my worthy predecessor, Dr. J. C. Culley, I commend your active work and efforts throughout my administration. I pledge my continued co-operation in the future, as in the past, in the furtherance of your work. I hope that the Association will foster and promote this proposition in the future, even more strongly than it has in the past.

I am anxious that during the coming year, the Mississippi Medical Association work, as it has never worked before, for the continuance of our

two-year medical school at the University. If you will pardon a personal reference, I consider it a great honor to be able to say that my first two years in medicine were received at this school. Since its beginning it has ranked among the foremost two-year medical schools in the country. The men at the head of this school are unexcelled anywhere. It is recognized as among the best and it must continue to function. Our Mississippi boys who intend studying medicine need this school. At home they can obtain a better course with less expense. Simply because our medical school is unable to meet large building and equipment requirements is no just reason for its abolishment. A vast amount of equipment is not necessary for the first two years in medicine. The department has ample equipment and buildings to carry on successfully, as it has in the past. If certain few things must be added it behooves the doctors of Mississippi to see that they are provided. I am confident, with the medical profession of the state squarely behind this school, it will continue. My desire is that its life and growth be not interrupted.

Again thanking you for your co-operation during the year and asking your support for the community hospital, your medical school at the University and your interest in an increased membership, I am

Faithfully,
James M. Acker, Jr.,
President.

Aberdeen,
March 29, 1933.

REPORT OF THE PRESIDENT-ELECT

The House of Delegates,
Mississippi State Medical Association,
Gentlemen:

The report of the activities of the president-elect of the year now drawing to a close is herewith submitted.

On January 16, 1933, I received a letter from the president, Dr. James M. Acker, Jr., directing me to institute a membership drive in the territory of Central Medical Society, Issaquena-Sharkey-Warren Counties Medical Society, Tri-county Medical Society, Pike County Medical Society, and Homochitto Valley Medical Society.

Contact was established with the secretaries of these societies and the membership drive inaugurated promptly. The secretaries were requested to get in touch with the vice-presidents of their respective societies and appoint them recruiting officers for their counties. The vice-presidents were asked to personally visit all eligible non-members in their respective counties and endeavor to enroll them as members. The secretaries were also asked to send me a report of their paid-up membership, also a list of the eligible non-members.

I wish to thank and compliment the secretaries for the splendid report of the membership and ac-

tivities of their respective societies. They acted promptly and efficiently in inaugurating the membership drive and I have every reason to believe that they have continued the effort to obtain members since February 1, 1933, the date set for its conclusion.

The report of the results of the drive was submitted to the president, Dr. James M. Acker, Jr., on March 3, 1933. The following is a brief epitome of the statistical report of members and non-members as of February 1, 1933:

Medical Society	Members	Non-Members
Pike County.....	27	0
Central	55	69
Tri-County	19	12
Issaquena-Sharkey-Warren	46	15
Homochitto Valley.....	28	15
Totals	175	111

When we consider the difficulties to be overcome in securing members during these days of financial strain, the above report is a rather commendable showing. I feel sure that if the financial situation improves quite a number of physicians who are non-members at this time will be found back in the fold again.

J. W. D. Dicks,
Natchez,
March 30, 1933.
President-Elect.

REPORT OF VICE-PRESIDENT, R. B. CUNNINGHAM.—Not available.

REPORT OF THE VICE-PRESIDENT

As vice-president of the Mississippi State Medical Association from the Middle District, will say my activities have been very limited. I was called on by our splendid president, Dr. James M. Acker, Jr., and was sorry my time was so limited I could not attend to his request in my usual manner. I felt that fifteen days was too short a time in which to make all the trips he had scheduled. However, I made part of them hoping I might be of some assistance to him. His request was that I visit the secretaries of certain societies and boost the membership.

The following suggestion I believe, would be helpful to both the president and the Association, and that is for the president to have the vice-presidents help tour the state at the different district meetings during the year and boost the membership. At the end of the year I would suggest that the president confer with the vice-presidents, and all meet together, along with, say, one of the big societies, and after talking things over thoroughly, they could then get together for the final membership drive.

One other suggestion I would like to make is in regard to part-time county health officers, as well

as full-time health officers. As you know, most of the counties have only part-time health officers. I believe any doctor to be eligible for this important position should be a member of his medical association, with an attendance record of at least fifty per cent. I know a few county health officers who seldom or never attend their county or district medical association meetings. I further believe the health officer should be required to take a short course in psychiatry, and should be expected to serve along with the jury on all sanity cases. If you were placed in my position as a member of the medical staff of the Mississippi State Hospital, I am sure you would realize the needed service an officer with some training along this line could render in the way of securing proper histories to accompany patients to the various hospitals. Properly filled out anamnesis blanks are very helpful in making a correct diagnosis. It is my understanding that the law now requires that a history accompany a patient to the Mississippi State Hospital, but this is not always the case, and there is often much delay in securing the proper information, due to the fact that practically no one knows how to go about getting the required facts; and, too, they do not realize how important this history is. The law also provides that all the evidence presented to the jury, showing the patient is dangerous as well as insane, shall be sent along with the patient. I think this is very important, as from this evidence we might determine whether it would ever be safe to grant the patient leave, and at the same time we would know better how to care for the patient while here. If this is interesting, I feel that I might be helpful in planning an inexpensive course for health officers, which I am sure would result in much benefit to many unfortunates, and this is my main reason for making this suggestion.

This is probably over-stepping the suggestions you requested me to make; however, I feel that the Mississippi State Medical Association and the State Board of Health should think seriously along this line, as our mental hospitals are being badly imposed upon, as are some of the patients whom we receive.

With kind regards, I am

J. S. Hickman,
Vice-President.

Jackson,

March 27, 1933.

REPORT OF VICE-PRESIDENT RILEY BURNETT—Not available.

REPORT OF THE HISTORIAN

Vicksburg,
April 10, 1933.

House of Delegates,
Mississippi State Medical Association,
Gentlemen:

Your historian reports that he has practically ex-

hausted his limited abilities and has not completed the History.

The section devoted to the records of our part in the World War is complete, except for the data relating to Dr. J. H. Steen of Vaughan, who died in service. I have endeavored to enlist the interest and assistance of several of the Yazoo County members, but none have condescended to answer my letters and attempts through other channels have been fruitless.

In the matter of the Presidents' Biographies I have had much the same lack of success. We still need portraits of Drs. Hyer, Ward, Toombs and Halbert. Two of these I have hopes of getting—Ward and Toombs. The other two, I fear we will never get. Of our living presidents, Glass, Barksdale, and Gamble continue to leave my letters unanswered, so that we have neither portraits nor biographies of them in the history. I trust that some future historian will be more successful.

The remainder of the History has been completed to date and the material is here for your consideration. With the exception of the likeness of the members of the first State Board of Health, all the illustrations are taken from cuts that are the property of the Association. These are in the custody of the Editor, who has used some of them in the Journal, and will be available if, at any time, the Association decides to publish the History.

Since we will probably, at this meeting, change the term of the Historian's office from five years to three, and since this is the end of the third year of the present term, this is a good time to make a change. If there be any doubt in the minds of anyone as to the legality of such action, please consider this my resignation. My failure to get the records, to which I have alluded, is ample evidence that we need someone else on the job, and while it has been a real privilege and pleasure to serve you in this office, my own wishes and feelings should not be permitted to stand in the way of the work.

Respectfully submitted,

E. F. Howard,
Historian.

SPEAKER OF THE HOUSE OF DELEGATES

Your letter of the 13th, inst., relative to my sending you a report of the activities of the House of Delegates of the Mississippi State Medical Association.

So far as the present Speaker is concerned there is no activity to report, and rightly so, for his office is that of a presiding one, and in addition to that the only thing I know he could do would be the naming of the various committees, which will be named with the advice and consent of the president of the Association.

Like you, I think this year will be rather crucial in the affairs of the association, and I do hope that things will so eventuate that the organization will

be in better shape this year than some pessimists now anticipate.

With kindest personal regards, and assurances of my anxiousness to help you whenever and wherever it may be possible.

J. P. Wall,

Speaker of the House of Delegates

Jackson,

March 15, 1933.

TREASURER'S REPORT

DECEMBER 31, 1933

ASSOCIATION FUND

BALANCE ASSOCIATION FUND AS

SHOWN BY LAST REPORT..... \$ 2,314.82

RECEIPTS—

Apr. 22, 1932—Dr. T. M. Dye, Secretary	\$ 437.00	
Mch. 14, 1932—Dr. T. M. Dye, Secretary	500.00	
Dec. 31, 1932.....	575.30	1,512.30
		<hr/> \$3,827.12

DISBURSEMENTS—

1/30/32—N. O. Medical & Surgical Journal—Cuts for pictures	8.17
2/ 5/32—N. O. Medical & Surgical Journal—Cuts....	28.04
3/ 1/32—Dr. Leon S. Lippin- cott, Editor, Salary.....	75.00
4/ 2/32—Clarksdale Print- ing Co.—Programs.....	57.88
3/19/32—N. O. Medical & Surgical Journal—Pub- lishing Journal	300.47
3/23/32—N. O. Medical & Surgical Journal—Cuts....	3.90
5/11/32—Miss. Engraving Co.—Historian's Exp.....	34.50
5/20/32—J. H. Johnson & Co.—Bond of Treasurer..	75.00
4/28/32—Mrs. Geo. Ander- son—Reporting	70.00
4/28/32—F. E. Dillon—Re- porting	163.40
5/31/32—P. O. Box Rent....	5.00
6/ 6/32—Unglaub Studio —Pictures	83.03
6/ 6/32—Dr. L. S. Lippin- cott, Editor, Salary.....	75.00
6/25/32—N. O. Medical & Surgical Journal—Cuts....	41.26
6/30/32—Clarksdale Print- ing Co.—Printing Trans- actions	264.71
N. O. Medical & Surgical Journal—Pub- lishing Journal	180.15

6/30/32—Miss. Engraving Co.—Historian's Acct.....	45.40
7/11/32—Dr. C. M. Speck, Community Hospital	15.00
8/16/32—Miss. Engraving Co.—Historian's Acct....	1.58
7/28/32—N. O. Medical & Surgical Journal—Cuts....	29.55
8/16/32—N. O. Medical & Surgical Journal—Cuts....	3.98
9/ 9/32—N. O. Medical & Surgical Journal—Pub- lishing Journal	191.25
9/ 9/32—Dr. Leon S. Lip- pincott, Editor, Salary....	75.00
11/ 7/32—N. O. Medical Journal—Cuts	11.94
12/ 5/32—Dr. L. S. Lippin- cott, Editor, Salary.....	75.00
Tax on checks.....	.26

Total Disbursements 1,814.52

BALANCE ON HAND..... \$2,012.60

MEDICO—LEGAL FUND

BALANCE — MEDICO-LEGAL FUND

AS SHOWN BY LAST REPORT... \$10,870.14

RECEIPTS—

1/12/32—Interest City of Meridian Bonds	12.50
3/11/32—Coupons 13 Bond 17, Wayne County.....	25.00
4/18/32—Coupons 27, 4th Lib. Loan	21.25
4/22/32—Dr. T. M. Dye, Secretary	813.00
5/28/32—Interest on C. of D. No. 622 Bk. of Clarks- dale	124.80
6/15/32—Coupon No. 8 Bond 24, Lauderdale County	12.50
6/15/32—Interest on 3,000 Government Bonds	60.00
6/15/32—Coupon No. 8 Bond 25, Lauderdale County	60.00
7/14/32—Interest City of Meridian Bonds	12.50
9/19/32—Interest on C. of D. No. 667 Bank of Clarksdale	88.36
Interest on Cert. of Dep. No. 644 Bk. of Clarksdale	62.40
9/19/32—Coupon 4, Bond 17, Wayne County.....	25.00
10/19/32—Int. on Liberty Bonds	21.25

12/31/32—Dr. T. M. Dye, Secretary	38.00	
12/31/32—Coupon No. 9, Bond 24, Lauderdale County	12.50	
Coupon No. 9 Bond 25, Lauderdale County	12.50	
Int. on U. S. Gov- Bonds	130.00	1,484.06
		<u>\$12,354.20</u>

DISBURSEMENTS—

4/20/32—Dr. A. S. Apple- white—Brown Case .. \$	125.00	
4/20/32—Dr. A. S. Apple- white—Wright Case	125.00	
4/20/32—Dr. W. E. Noblin —Blum Case	100.00	
4/20/32—Est. Dr. J. H. Rush—McCright Case.....	250.00	
6/ 2/32—Accrued Int. on Treasury Certifs.....	67.71	
7/30/32—W. Calvin Wells —Attorney's Fees	250.00	
9/24/32—Wayne County Int.—Default	25.00	
9/23/32—Premium and Ac- crued Int. on Treas- ury Ctfs.	212.55	
Total disbursements	1,155.26	

BALANCE ON HAND—Medico-Legal ..	\$11,198.94
BALANCE ON HAND—As- sociation Fund	2,012.60
BALANCE ON HAND—Medi- co Legal Fund	11,198.94

TOTAL FUND BALANCES \$13,211.54

THESE FUNDS DISPOSED OF AS FOLLOWS:

Bank of Clarksdale	1,997.35
Securities—	
Wayne County Bond No. 17..	1,000.00
Lauderdale County Bonds No. 24 and 25	1,000.00
City of Meridian Bond No. 13	500.00
Fourth Liberty Loan Bond No. K00705340	1,000.00
Certificate of Deposit No. 667 Bk. of Clarksdale	1,127.56
Certificate of Deposit No. 388 Bk. of Winona	37.13
Certificate of Deposit No. 389 Bk. of Winona	49.50
Treasury Certificate 4% No. J00169839	1,000.00

Treasury Certificate 4% No. K00169840	1,000.00	
Treasury Certificate 4% No. A00169841	1,000.00	
Treasury Certificate 4% No. E000530085	500.00	
Treasury Certificate 4% No. A00183841	1,000.00	
Treasury Certificate 4% No. B00183842	1,000.00	
Treasury Certificate 4% No. C001083843	1,000.00	11,214.19

\$13,211.54

E. Leroy Wilkins,
Treasurer.

FINANCIAL STATEMENT 1932, SECRETARY

Clarksdale,

April 10, 1933.

Receipts:

April 5—Hospital Association \$	12.50
Dec.31—852 Dues at \$4.00.....	3,408.00

Total \$3,420.50

Disbursements:

Jan. 8—1 M. Envelopes.....	22.24
29—Refund Pike County.....	4.00
30—Printing	6.00
Mch. 14—800 Envelopes	17.80
Apr. 14—Registrar	12.50
14—Reporter	60.00
14—President's Expense Ac- count	100.00
15—J. W. Lucas, Councilor	11.50
15—H. J. Rush, Councilor	7.00
15—D. J. Williams, Coun- cilor	12.70
15—W. H. Watson, Coun- cilor	2.70
15—L. L. Minor, Councilor	12.10
15—J. L. Green, Councilor.....	9.20
15—T. J. Brown, Councilor.....	7.00
18—M. L. Flynt, Hospital	10.00
18—R. W. Smith, Hospital	8.00
18—W. H. Anderson, Hos- pital	18.00
18—E. R. Nobles, Hospital	45.00
18—J. P. Culpepper, Hos- pital	20.00
18—V. B. Philpot, Hospital (Sec.)	20.00
18—V. B. Philpot, Hospital	60.00
18—R. W. Caldwell, Hos- pital	15.00
18—C. M. Speck, Hospital	15.00
18—Treasurer's Expense Account	26.46
18—Paid Treasurer	1,250.00

Apr. 7—Refund, J. A. Chadwick	1.00
Aug. 18—Refund, Issaquena - S - Warren	4.00
Nov. 1—Paid Treasurer	500.00
Dec. 30—Paid Treasurer	613.30
31—Secretary's Salary	500.00
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Total	\$3,420.50
Nov. 1—Postage	\$ 30.00
T. M. Dye, Secretary.	

FIRST COUNCILOR DISTRICT

The First District consists of two active societies—the Clarksdale and Six Counties Medical Society and The Delta Medical Society.

The first mentioned embraces the counties of Coahoma, Tunica, Tallahatchie, Quitman and part of Bolivar. The second mentioned embraces the following counties: Washington, Leflore, Sunflower, Humphreys, and most of Bolivar.

There are 247 white physicians in the First District territory; 108 active members, and 139 non-members. The Clarksdale and Six Counties Medical Society shows a membership of 38, and a non-membership amounting to 55. The Delta Medical Society shows a membership of 70, and a non-membership amounting to 84.

The members and non-members arranged by counties are as follows:

CLARKSDALE AND SIX COUNTIES MEDICAL SOCIETY

County	No. of		No. of		Non-Meb'rs
	White	Phys'ns	Phys'ns	Phys'ns	
		1932	1933	Meb'ship	
COAHOMA	33	21	19	14	
BOLLIVAR	12	8	5	7	
TUNICA	11	3	1	10	
TALLAHATCHIE ..	20	8	8	12	
QUITMAN	17	6	5	12	
<hr/>		<hr/>			
Total	93	46	38	55	

DELTA MEDICAL SOCIETY

County	No. of		No. of		Non-Meb'rs
	White	Phys'ns	Phys'ns	Phys'ns	
		1932	1933	Meb'ship	
WASHINGTON	41	24	27	14	
LEFLORE	41	10	15	26	
BOLIVAR	27	14	12	15	
SUNFLOWER	31	9	12	19	
HUMPHREYS	14	5	4	10	
Total	154	62	70	84	
<hr/>		<hr/>			
GRAND TOTAL ..	247	108	108	139	

The District during 1932 suffered a loss of three physicians by death, viz: Dr. B. J. Barnette, In-

dianola; Dr. C. E. Holmes, Silver City; and Dr. C. W. Smith, Glendora.

Each association held its semi-annual meetings as usual with good attendance, good programs and manifested interest. No malpractice suits vs. our membership to date.

With better times in view, we are going forward with courage and confidence.

J. W. Lucas,
Councilor First District.
Moorhead,
April 3, 1933.

SECOND COUNCILOR DISTRICT

My report as councilor is incomplete; I have not received complete report from the county and district secretaries.

I have from time to time sent in news items from this district and the readers of our esteemed Journal ought to be fairly well informed as to conditions in the district.

Hoping that the coming meeting of our State Association will be one of the best that we have ever had,

I beg to be
Very respectfully,
L. L. Minor,
Councilor.
Memphis, Tenn.,
Route 4,
April 5, 1933.

THIRD COUNCILOR DISTRICT

M. W. Robertson, Councilor—Report not available.

FOURTH COUNCILOR DISTRICT

The President and House of Delegates, Mississippi State Medical Association.
Gentlemen:

This, my report, as Councilor for the Fourth District.

We have only one local society, Winona District. We have had but three meetings this year with good programs and fairly good attendance. I have attended these meetings at Ackermann and Grenada but was prevented from being at Winona. I have endeavored by groups and personal appeals to increase our membership, but have been unable to enlist the interest or co-operation of a majority of the doctors of the District. I can not satisfactorily account for this indifference. A study of the following tables of counties with the number of registered physicians and paid members in each, to-wit:

County	Registered	
	Doctors	Members
Carroll	10	3
Choctaw	7	4
Grenada	10	5
Holmes	24	12

Montgomery	12	6
Webster	13	2
Attalla	15	0
	91	32

Possibly our geographical grouping is responsible and a re-arrangement of our lines would reach these negligent physicians. I make this as a suggestion rather than a recommendation, leaving to the wisdom and judgment of the Council to offer a successful plan. Out of this large list we certainly ought to have a better membership.

I will appreciate any suggestions looking to the accomplishment of this end.

So far as I can ascertain everything is harmonious among the doctors of the District, and between doctors and their patients. No damage suits are now pending. Dr. Clanton won a verdict in the case against him at the recent term of circuit court.

In concluding my report I deem it proper to mention the death on February 15, of our veteran fellow laborer, Dr. J. W. Young. His passing is well nigh an irreparable loss to our profession and to the cause of humanity as well. We have known few like him.

Respectfully,

T. J. Brown,
Councilor Fourth District.

Grenada,
April 9, 1933.

FIFTH COUNCILOR DISTRICT

To the House of Delegates of the Mississippi State Medical Association.

Gentlemen:

I beg to make the following report for the Fifth Councilor District.

The District is divided into three component parts, namely, Issaquena—Sharkey—Warren Counties Medical Society, composed of the counties of Issaquena, Sharkey and Warren. They hold regular monthly meetings with well arranged programs and these meetings are well attended.

I want to congratulate the members of Issaquena County with a 100 per cent membership in the society.

Sharkey County has 13 resident doctors with a membership of 6.

Warren County has 41 resident doctors with a membership of 29.

In the group composing this society you will see there are 57 resident doctors with a membership of 38, or 66 2/3 per cent.

Claiborne County has 8 resident doctors with a membership in their society of 6, or 75 per cent.

The Central Medical Society, the largest in the district is composed of six counties, namely, Hinds, Madison, Rankin, Scott, Simpson and Yazoo, has

a total of 175 doctors with membership in the society of 87 or a little less than 50 per cent, divided as follows: Hinds, 106 resident doctors with 65 paid members; Madison, 10 resident doctors with 4 paid up members; Rankin, 8 resident doctors with 3 paid up members; Scott 12 resident doctors with 4 paid up members; Simpson, 18 resident doctors with 6 paid up members; Yazoo, 21 resident doctors with 5 paid up members.

I am unable to explain this slump in membership in the society as the meetings are well attended and excellent programs at each meeting. On the basis of other societies this society should have a membership of 125.

On the whole the societies in this district are doing excellent work. There has been only one law suit in this district reported since the last meeting of one year ago. In my opinion the question of medical legal funds, or the assistance given doctors in these law suits, is a thing that we should give a little more thought, at present I have no suggestion to offer.

Respectfully submitted,

W. H. Watson,
Councilor 6th District.

Pelahatchie,
April 5, 1933

SIXTH COUNCILOR DISTRICT

The Sixth District is composed of the following seven counties: Lauderdale, Newton, Neshoba, Winston, Kemper, Leake and Scott.

Four of these counties, Lauderdale, Newton, Neshoba and Winston function as the East Mississippi Medical Society and have had a very successful year under the able direction of Dr. Dudley Stennis, president, and Dr. T. L. Bennett, secretary. Regular bi-monthly meetings have been held with an average attendance of 46 or 63 per cent. There is a paid up membership of 73 out of a possible 97 doctors in the four counties or 75 per cent.

I have ready to present to the Council a petition signed by a majority of the physicians of Kemper County requesting the Association to grant them permission to merge with the East Mississippi Medical Society. No meetings of the Kemper Society have been held during the past year and I am informed that officers were elected by mailing ballots. A number of these physicians have been attending the East Mississippi meetings and I believe this merger should be permitted.

Leake County, in so far as I can learn, has been absolutely inactive and has no organization. I have made repeated efforts to stimulate interest but to no avail. Correspondence is unanswered.

Scott County now belongs to the Central Medical Society.

There are no law suits pending against any physicians of this district. The suit against Dr.

C. T. Burt of Meridian was tried and a verdict rendered in favor of the defendant.

H. Lowry Rush,
Councillor, Sixth District.

Meridian,
April 10, 1933.

SEVENTH COUNCILOR DISTRICT, Joe E. Green,
Councillor..... Report not available.

EIGHTH COUNCILOR DISTRICT

The Eighth District, composed of the Homochitto Valley, Pike County and Tri-County Medical Societies, has had well attended meetings through the entire year; fine scientific programs rendered, frequently by outstanding men in the profession. Much enthusiasm has been shown by all attending these meetings, but as usual there are a few in every society that are members in name only for the name sake and the protection the professional organization gives them against public criticism and for medico-legal defense. Then there are a very few, I am glad to report, that feel that "those fellows on the program don't know a . . . thing thing more than I do about that subject—and besides I know exactly what they will say." That guy is a dollar grabber and stays at home while his confrere goes and bears the standard of his profession and very charitably lies for his absent brother "that he had an urgent call"—to stay at home, yes?

We are not yet ready to make a final report on the District since there are yet a few good sheep to gather into the fold. We want them—need them. They need us. We of the profession and the public as well need closer and stronger organization than ever before in the history of this country for isms and cults are seeking in every way to evade all laws in order to carry out their selfish ends and fatten on the unsuspecting and ignorant public who are only too willing to be duped by such who frequently act under the disguise of "doctor."

The Council wishes that the House of Delegates meet promptly May 9, 8 A. M., at which meeting some vital things of interest to our Association will come up for final action and some legal points are to be determined. If your local society has honored you with the responsible office of delegate, YOU should go or send your alternate—or promptly resign. Don't be a drone. If you have anything to come before the Council at this meeting, please, for expediency's sake, reduce it to writing and hand or mail it to the secretary or to the president of the Council, Dr. Dan. J. Williams, Gulfport, and it will get prompt attention and this will greatly facilitate the work of the Council which is always rushed in order for the members to attend the meetings of the general session.

We are looking forward to the May meeting of our Association with unusual anticipation as we are reliably informed from the inside that a most excellent and entertaining program is in store, besides some addresses by men of merit outside our Association will be given. Then, too, we are this year marching under the banner of "The Spirit of Youth" (President James Acker) and "The Spirit of Maturity and Wisdom" (President-Elect John W. D. Dicks), and who could choose from our members a better combination? They represent the **BEST local secretary** of any society and the **BEST councillor** who has yet represented our state.

The Council requests that each member—especially the delegates, read carefully the last number of the New Orleans Medical and Surgical Journal as to our proposed changes in the constitution offered at our 1932 meeting for adoption at our May meeting. These are vital pabulum for your consideration, so come prepared to act intelligently.

Let each councillor have a written report and his expense account ready at our first meeting of the Council. Chairman Williams not only expects it but demands that of all good councillors—and you must be one or fall by the wayside at the next election. By the way let me say that this matter of choosing a councillor is your major problem. I am not a candidate so I will express myself. The councillor is your law making representative. He is your conservator and of the Association. He should be a good steward, one who will have wisdom and discretion, one that will weigh matters affecting our very life in the Association, one who can advise and conciliate between any contending or contentious factions.

Lay aside your personal friendship, companionship or other feelings in the premises and vote for the man who nearest meets these rigid requirements to meet the emergencies in any case. We frequently let our petty jealousies and dislikes thwart our better judgement in this matter.

We have had a good year in the Association and have made progress in spite of difficulties and depressions. We shall be led next year by a tried and true representative of our profession, one who has shown himself as a private citizen, physician and surgeon, soldier and God-fearing man. Let us get behind him and not let our banner drag but keep it well up to the forefront of our loyal state associations.

W. H. Frizell, Councillor.
Eighth District.

Brookhaven,
April 8, 1933.

NINTH COUNCILOR DISTRICT, D. J. Williams,
Councillor..... Report not available.

COMMITTEE ON PUBLIC POLICY AND LEGISLATION

I have yours with reference to Committee on public policy and legislation, and just now we have not formulated anything of particular interest to the House. However, there are several things in process of formation that will probably be brought up and I will give them to you as early as I possibly can.

Henry Boswell,
Chairman.

Sanatorium,
March 15, 1933.

COMMITTEE ON CONSTITUTION AND BY-LAWS

The Committee on Constitution and By-Laws has had one meeting with two members present. There is only a small bit offered this time so far. We have called privately and through the Journal for any suggestions that might be offered but to date none have appeared.

W. H. Frizell,
Chairman.

Brookhaven,
April 7, 1933.

REPORT OF COMMITTEE ON COMMUNITY HOSPITAL LEGISLATION

To The Mississippi State Medical Association:
Gentlemen:

Your committee on Community Hospital Legislation, appointed two years ago and reappointed one year ago to function as a legislative committee for community hospitals throughout Mississippi, herewith submits the following report:

Since the meeting of this Association last year we have been active in legislative matters for the community hospitals and have done all we could to inform the legislators and the people as well, in reference to the necessity of a more equitable distribution of funds appropriated for the care of charity in our state.

Many years ago before the establishment of community hospitals in Mississippi, in fact, hardly before any hospitals were established in the state, it was necessary for our state government to own and operate state charity hospitals for the care of the indigent sick in the State of Mississippi. At that time we judge there were very few capable surgeons and hospital people available to operate these institutions and apparently the only way for the unfortunate poor to secure hospitalization was for the state to operate its own institutions. Immense sums of money have been appropriated to these hospitals during the past half century and there is no doubt in our minds that this money has been well spent and has done a great deal of good.

In years gone by in the neighborhood of \$300,-

000.00 annually has been appropriated for the care of the poor of Mississippi needing hospital attention in a general hospital, a great per cent of which has gone to the state-owned hospitals. Investigation will show that in the neighborhood of three-fourths of this money has been spent on people from either the county or adjoining counties to these institutions. A large proportion of the population has received very little benefit from these sums and are receiving less each year, owing to the fact that they can go to their home institutions and almost pay hospital expenses with a sum equal to that of traveling and other incidental expenses of going to and from the state-owned hospitals.

The progress of medicine, however, during the last decade has caused the building of more than fifty hospitals by individuals, corporations, municipalities, and counties throughout the state, a great majority of them being excellently equipped with every modern convenience, far more so than the state institutions have ever been, and are being operated by personnels of well trained hospital people, having on their staffs outstanding medical and surgical men free from any political interference. This has, in our opinion, changed the hospital situation in Mississippi in regard to the care of the state's charity patients. We believe the services of the state-owned institutions should rapidly come to an end or be operated as community hospitals only, and such monies as have heretofore been appropriated to these institutions for the needy should go to all the approved hospitals in Mississippi. We would like to call the attention of this body to the fact that at the present time **THERE ARE ONLY EIGHT STATE-OWNED HOSPITALS IN THE UNITED STATES AND MISSISSIPPI HAS FIVE OF THEM.**

We would like also to call your attention to the fact that we are informed that the capacity of all the state-owned hospitals combined is less than 700 beds, and probably less than one-half of these have been used during the last two years, presumably because of lack of funds. On the other hand, according to our survey, there are between 1000 and 1200 empty beds available for charity in the other hospitals of Mississippi, one of these institutions being located in almost every community and convenient to all the people.

The plan which we recommended to the Legislature was that the appropriations for the care of charity patients in Mississippi be made on a per capita basis, allotting to each county a certain sum of money in proportion to the population of said county, to be used to care for hospital expenses of the needy of that particular county.

Assuming that we are going to spend \$300,000.00 per year in Mississippi for the care of charity. This is equivalent to 15 cents per capita, which

would give the county of Hinds with 85,000 people approximately \$13,000.00 per year for the care of the charity patients in that county, and would give the county of Desoto of 26,000, in the extreme north end of the state, approximately \$4,000.00 for the care of its charity.

All hospitals of Mississippi when approved by a board of hospital inspectors can qualify to take charity patients but must take said patients on an actual cost basis, and no doctors' fees are charged. This actual cost is to be ascertained by a survey of all the hospitals in the state, or adjoining states, or the entire country, if desired. The charity patients of the various counties in Mississippi could then go to the hospital of their choice or the one recommended to them by their family physician. As a rule, of course, they would go to the institution nearest them. The family physician and two citizens of the county in which the patient resides shall recommend all charity patients as objects of charity. Their certificate is legal evidence that the case is one of charity, and the bill of actual cost is charged against the allotment of the county in which the patient resides.

We contend that this plan will save many lives among the poor people of Mississippi by rendering it possible for them to secure hospitalization near their homes. We further contend that it will save the patients and their people enormous sums of money they have heretofore had to spend in carrying their indigent poor a long way from home to the state charity institutions.

We have no fight at all with the state-owned hospitals. They have done a great work, but we do believe that it is time for them to become community hospitals and operate under the same plan as outlined above, which allows not only the hospitals remote from cities where state-owned hospitals exist to care for the charity on an actual cost basis but also all the hospitals in the cities where state-owned hospitals are to do likewise. In other words, all hospitals meeting the approval of a board of hospital inspectors have a right to care for charity patients in Mississippi, recommended to them by the patient's family physician as charity, on an actual cost basis.

Now, a bill incorporating the above plan was submitted to the 1932 session of our Legislature. Our committee made several trips to Jackson in behalf of this bill. We were invited to appear before both the finance and appropriation committees, where we made an earnest endeavor to secure favorable reports. Lieutenant Governor Murphree, who wrote the first bill for an appropriation to community hospitals twelve years ago and who has since continuously advocated and fostered plans of this kind, accompanied our group before the finance committee and make a speech

advocating state aid for community hospitals. The finance committee gave us a very fine hearing and as much time as we desired, and they had a full attendance. At this time we were invited to appear before the appropriation committee there seemed to be other business of importance, and the chairman of this committee, as well as some other members, were not present, and only a limited time was allowed us. However, a fairly good number were present and were apparently deeply interested in our program.

The Legislature was in session a long time and our bill was apparently pigeon-holed in the appropriation committee and failed to make its appearance. A day or two before the session adjourned a substitute bill was rushed through the Senate by friends of community hospitals in that body, but it incorporated only a part of our plan, and gave to some thirty-five hospitals a very small amount each to be used partially as we had suggested. The state hospitals were left to function as heretofore but appropriations were greatly reduced. The thirty-five institutions named in our bill received altogether \$39,000.00, a little more than that appropriated to one state-owned institution. While the amount was exceedingly small, the committee greatly appreciates getting this for community hospitals in Mississippi, and we find upon investigation, that even this small amount has done a great deal of good in the care of the unfortunate poor in sections of Mississippi where no state-owned institution exists.

We are candidly of the opinion that a great majority of the membership of both the House and Senate are in favor of our plan. And may we say here that we deeply appreciate the strong efforts of the friends of the community hospitals in the Legislature and their earnest endeavors in behalf of our program, and we sincerely hope that the membership of the State Medical Association will impress upon all members of the Legislature in their respective communities the importance and necessity of an equitable distribution of the appropriation for charity and insist that they make such an appropriation on a per capita basis so that every county in the state shall share in said appropriation in keeping with its population, which will render it possible for the unfortunate poor, needing hospital attention, to go to their home institutions, be near home people, and be saved enormous expenses, as well as, in many instances, life itself.

As stated above, our bill giving aid to the community hospitals requires the institutions to accept patients on an actual cost basis. This actual cost basis was arrived at by using the latest survey of the American Hospital Association of nearly all the hospitals in the United States, setting forth

the cost per day per patient in the various states; also by letters received from a number of the largest hospitals in our adjoining states as well as a great number of hospitals in Mississippi. This information being presented to the boards of trustees of the various institutions and the fee adopted in keeping with the cost based on all this information, and no medical or surgical fees charged at all.

Now, the American College of Surgeons, American Medical Association, American Hospital Association and other organizations are continuously making surveys of the cost of hospitalization in this country, and are annually publishing the actual cost per day per patient in all the states and the United States as a whole. The surveys are impartial and unbiased and are made only for the purpose of ascertaining the cost of hospitalization and with the hope of reducing same as much as possible. We find that the community hospitals are entirely willing to adopt a fee for the care of charity in Mississippi in keeping with the actual cost per day per patient ascertained by these various organizations. They are even willing and ready to accept a survey of a joint commission appointed by this organization and state authorities to make a survey of the hospitals of the entire nation, if they so desire, in reference to the cost of hospitalization, and will accept what they find to be the actual cost per day per patient of the entire nation as a fee basis for the care of all charity patients in Mississippi.

After the community hospitals began using the little funds appropriated to them last year in accordance with the bill making said appropriation, and the boards of trustees of the various institutions appointed by the governor, who, according to the attorney general, had full authority concerning the use of said funds, had determined what was actual cost by the methods above mentioned and the actual cost fees were adopted, it was necessary for your committee, accompanied by the officials of the State Medical and State Hospital Associations, to make several trips to Jackson to counteract propaganda put out by just a few people, possibly only one or two, to the effect that the community hospitals in Mississippi were charging excessive fees for their services to charity patients.

These parties or party, whom we were assured by high state officials represented nobody in authority, apparently spent more time, on a pretense of economy, trying to humiliate the community hospitals of Mississippi, all of them having an exceedingly hard time to exist, in the expenditure of the little sum handed out to them, than was spent on the \$20,000,000.00 otherwise expended by the State of Mississippi for everything.

We would not mention this propaganda if it were not for the fact that off and on all during last year

letters containing statements very embarrassing to honest people were mailed out from these parties or party concerning the expenditure of the little fund each of the institutions received; and only recently letters were mailed to all members of the Legislature trying to create an impression that state-owned hospitals can be run so much more economically for charity patients than the actual cost fee basis of other institutions. Just why so much interest in an apparent endeavor to embarrass and humiliate the community hospitals, and apparently so much more favorable interest in state-owned institutions, we are unable to understand.

These same people seem absolutely unable to consider the enormous sums of money tied up in state-owned institutions, the interest on this money, the depreciation on buildings and that every few years additional appropriations are being made for large sums of money for new equipment, building repairs, etc., which are not counted in their regular running expenses; that these institutions pay no taxes; that they receive a great number of patients with minor ailments and medical cases that are inexpensive, while ninety to ninety-five per cent of the patients that go to the community hospitals go there for major operations which require operating room fees, anesthetic and laboratory fees, possibly x-ray services, etc., and a longer stay in the hospital.

These same propagandists seem unable to recognize the fact that the expense of long trips for people having to go to state-owned institutions has to be paid by the community in which the patient lives. They seem further to be absolutely unable to recognize the fact that the services in community hospitals, which are being run for both pay and charity patients and where all cases get the same treatment, are naturally supposed to be and are of a higher type.

The committee, therefore, appeals to the membership of this organization to inform your legislators of the true facts that actually exist concerning the apparent difference in cost of state-owned institutions and those operated by other folks. You can truly say to them that it is unreasonable to assume that people appointed to serve state institutions, regardless of their past experience (some without any), become such wizards in economy and efficiency that they can operate state charity hospitals so much more economically than folks who operate all the other hospitals in the United States, and who have given a greater portion of their lives to this work and have had years of experience entirely free from political influences.

In conclusion, gentlemen, we wish to express our appreciation for the whole hearted cooperation of the president of the Association, Dr. J. M. Acker,

who has met with us on every occasion during the year and who has been whole heartedly behind our program in every detail.

We are also deeply indebted to Dr. J. Gould Gardner, president of the State Hospital Association, Dr. J. C. Culley, ex-president of this Association and chairman of the Committee on Hospital Legislation from the State Hospital Association, and Dr. W. W. Crawford, chairman of the Committee on Hospital Legislation up until May, 1932, who have likewise met with our committee several times and have rendered it very valuable service.

In addition to these officials, we have had a number of very prominent members of our Association, as well as Mr. Hamilton Crawford and Miss Mary Dorsey, R. N., members of the Board of Hospital Inspectors, present and doing all in their power to assist us in our program.

And again may we say that we deeply appreciate the encouragement and assistance of the many friends to the community hospitals among our law making body.

Respectfully submitted.

E. R. Nobles, M. D., Rosedale, Chairman District Three.

V. B. Philpot, M.D., Houston Secretary and Representative, District Four.

R. B. Caldwell, M.D., Baldwin, District One.

C. M. Speck, M.D., New Albany, District Two.

M. L. Flynt, M.D., Meridian, District Five.

J. P. Culpepper, M.D., Hattiesburg, District Six.

J. W. D. Dicks, M.D., Natchez, District Seven.

R. W. Smith, M.D., Canton, District Eight.

W. H. Anderson, M.D., Booneville, State-at-large.

COMMITTEE ON BUDGET AND FINANCE, D. C. Montgomery, Chairman.—No Report available.

MISSISSIPPI STATE HOSPITAL ASSOCIATION FOURTH ANNUAL SESSION

EDWARDS HOTEL, JACKSON, MISSISSIPPI

OFFICERS—1932-1933

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J. Gould Gardner, M.D.,.....Columbia

VICE-PRESIDENT

R. J. Field, M.D.,.....Centreville

SECRETARY-TREASURER

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Leon S. Lippincott, M.D.,.....Vicksburg

John C. Culley, M.D.,.....Oxford

V. B. Philpot, M.D.,.....Houston

MONDAY MORNING, MAY 8, 1933.

All members of the Mississippi State Medical Association are cordially invited and urged to attend all sessions including the banquet.

8:00 A. M.—Registration (mezzanine floor, Edwards Hotel)

9:00 A. M.—Meeting called to order by the President, Dr. J. Gould Gardner, Columbia Clinic and Hospital, Columbia.

Invocation

Roll Call

Reading of minutes of last meeting

President's address

Report of Board of Directors

Report of Secretary

Report of Treasurer

Announcements

Introduction of Distinguished guests

Unfinished business

Report of Committees (each to be followed by round table discussion):

1. Community Hospitals.—Dr. V. B. Philpot, Houston Hospital, Houston, Chairman. Discussion opened by Dr. E. R. Nobles, Rosedale, Chairman, Committee on Community Hospital Legislation, Mississippi State Medical Association, and Dr. H. A. Gamble, King's Daughters' Hospital, Greenville.

2. Legislation.—Dr. John C. Culley, Oxford Hospital, Oxford, Chairman. Discussion opened by Hon. John H. Culkin, Vicksburg, Dr. W. H. Anderson, Booneville, and Dr. G. Lamar Arrington, Matty Hersee Hospital, Meridian.

3. Charity Hospitals.—Dr. B. B. Martin, Vicksburg Infirmary, Vicksburg, Chairman. Discussion opened by Dr. C. A. Everett, Natchez Hospital, Natchez, and Mr. Frank H. Andrews, Mississippi State Charity Hospital, Vicksburg.

4. Publicity.—Mr. W. Hamilton Crawford, South Mississippi Infirmary, Hattiesburg, Chairman. Discussion opened by Dr. Noel C. Womack, Jackson Infirmary, Jackson, and Dr. M. D. Ratcliff, McComb City Hospital, McComb.

5. Minimum Standards.—Dr. W. W. Crawford, South Mississippi Infirmary, Hattiesburg, Chairman. Discussion opened by Dr. W. J. Anderson, Anderson Infirmary, Meridian, Dr. J. P. Howell, King's Daughters' Hospital, Canton, and Miss Mary E. Crook, R. N. Tupelo Hospital, Tupelo.

6. Nurses and Nursing.—Dr. A. Street, Vicksburg Sanitarium, Vicksburg, Chairman. Discussion opened by Dr. A. M. McCarthy, Geo. C. Hixon Memorial Hospital, Electric Mills, Miss., Maude P. Varnado, R. N., Laurel General Hospital, Laurel, and Miss Julia T. Tebo, R. N., Secretary of Louisiana Board of Nursing Examiners.

7. Membership.—Dr. R. J. Field, Field Memorial Hospital, Centreville, Chairman. Discussion opened by Dr. J. W. Moody, Charleston Hospital, Charleston, Dr. J. K. Avent, Grenada Hospital, Grenada, and Miss J. Gridge, R. N., Holmes County Community Hospital, Lexington.

Report of representative to the joint meeting of

the Hospital Association of Tennessee, Arkansas and Kentucky, 1932—Mr. W. Hamilton Crawford, Hattiesburg.

Report of representative to the meeting of Hospital Association, Presidents and Secretaries with the American Hospital Association and to the meeting of the Council on Medical Education and Hospitals of the American Medical Association.—Dr. R. J. Field, Centreville.

New Business.

12:30 P. M.—Adjourn for lunch.

MONDAY AFTERNOON, MAY 8, 1933

2:15 P. M.—Call to order.

Announcements

PAPERS AND DISCUSSIONS:

1. The advantages of a Closer Relationship Between the State Board of Health and the Community Hospitals.—Dr. F. J. Underwood, Jackson, Executive Officers, Mississippi State Board of Health. Discussion opened by Dr. E. S. Bramlett, Bramlett Hospital, Oxford, Mr. B. T. Whitfield, Corinth Hospital, Corinth, and Dr. F. B. Long, Oktibbeha Hospital, Starkville.

2. State Aid to the Voluntary Hospital.—Mr. W. Hamilton Crawford, Hattiesburg. Discussion opened by Dr. P. L. Fite, Fife Hospital, Columbus, Dr. F. P. Ivy, Ivy Hospital, West Point, and Dr. M. Q. Ewing, Gilmore Sanitarium, Amory.

3. The Employment of Registered Nurses vs. Training Schools in Small Hospitals.—Dr. W. H. Frizell, King's Daughters' Hospital, Brookhaven. Discussion opened by Dr. H. Lowry Rush, Rush's Infirmary, Meridian, Mr. G. D. Stanley, King's Daughters' Hospital, Greenville, and Dr. Henry Boswell, Mississippi State Sanatorium, Sanatorium.

4. How May the Hospital Make Itself Known to Its Community?—National Hospital Day.—Dr. W. W. McRae, McRae Hospital, Corinth. Discussion opened by Dr. George W. Brown, Water Valley Hospital, Water Valley, Miss Mary E. Dorsey, R. N., King's Daughters' Hospital, Greenville, and Mrs. Esther Rohrer, R. N., King's Daughters' Hospital, Gulfport.

5. Communicable Diseases in the General Hospital.—Dr. Omar Simmons, Newton Infirmary, Newton. Discussion opened by Mr. H. Ogden, Methodist Hospital, Hattiesburg, and Dr. D. J. Williams, Health Officer, Harrison County, Gulfport.

Address—Rt. Rev. Monsignor J. P. Fisher, President, Arkansas Hospital Association, Little Rock, Arkansas.

Business

Election of officers.

MONDAY EVENING, MAY 8, 1933.

6:45 P. M.—Banquet—Edwards Hotel.

Toastmaster—Dr. J. Gould Gardner, President.

Speaker—Dr. Bert W. Caldwell, Chicago Exe-

cutive Secretary, American Hospital Association. Introduction of the incoming President of the Mississippi State Hospital Association.

All members of the Mississippi State Hospital Association are cordially invited and urged to attend all sessions of the Mississippi State Hospital Association.

MISSISSIPPI STATE BOARD OF HEALTH

A study of dental practices with special application to public health programs will be undertaken shortly in the North and Middle West by Dr. William R. Wright, Jackson, member of the State Board of Health.

Dr. Wright had been appointed for the survey by the Commonwealth Fund of New York and will make his trip of observation as the guest of the philanthropic agency. The fund is cooperating in Mississippi's public health program.

Dr. Wright, who has been a factor in moulding the dental hygiene program of the Mississippi health department, considered second to none in the country, will study work and methods in children's dentistry and public health programs on an itinerary that will include:

Several clinics in New York City and Boston, the Forsyth Training School, the Rochester Dental Dispensary, public clinics of Cleveland and Chicago and the Harvard and Tufts Dental Schools. Dr. Wright will contact leaders in the profession in other centers, exchanging information and outlining to them Mississippi's work in this field.

Dr. Wright, who is serving his second six-year term on the board, of which he is the dental member, has served as president of the Mississippi State Dental Association, Mississippi councilor for the American Dental Association, and a member of the board for the national organization.

Dr. E. R. Coffey of the United State Public Health service was a visitor to the Mississippi State Board of Health recently. While here, he, accompanied by Dr. Ricks, made observation trips to the health departments in Warren and Holmes Counties.

A recent report from the Division of Mouth Hygiene of the State Board of Health, gives the information that of the 54,989 mouths examined during the last seven months, 41 per cent were okeh. This means that the school children of Mississippi are getting the excellent habit of keeping their mouths clean and free of dental defects. This is a remarkable showing. Only six years ago, the percentage of okeh mouths found on examination in the same number of mouths was only 28 per cent.

During the last two weeks of March an immunization program in Madison County resulted in the

giving of 1994 doses of typhoid vaccine and 430 doses of toxoid.

During the past fifteen years, thirty deaths in human beings due to hydrophobia have been recorded in Mississippi. Fourteen quarantines are now on in Mississippi, most of them being for entire counties. The State Hygienic Laboratory sent out 1312 rabies treatments during last year, and during the first three months of this year, nearly five hundred treatments have been sent out by the State Laboratory. If laws requiring vaccination of dogs were enforced, life, suffering, worry and expense would be saved.

Dr. John A. Ferrell of the Health Division of the Rockefeller Foundation was a visitor to the Mississippi State Board of Health several days during March. Dr. Ferrell was in Mississippi for the purpose of looking over the programs to the support of which the Rockefeller Foundation is contributing. From Jackson, Dr. Ferrell went to Dallas, Texas to attend the meeting of the Pan American Medical Association. From there he went to Mexico City, Cuba, Florida, and back to Washington by plane.

Scholarships for the study of medicine at Tulane Medical School, available under the Commonwealth Fund's plan of cooperation with the Mississippi State Board of Health and Tulane University, have been awarded.

Those who received awards are:

Martin Luther Flynt, son of Dr. M. L. Flynt, now of Meridian.

Robert Peyton Vincent, son of Mrs. Bertha Jane Vincent, Jackson.

Charles Roderick Jenkins, son of Mr. D. R. Jenkins, Hattiesburg.

Thomas Lambert, son of Mrs. Carrie C. Lambert, Charleston.

Howard Alexander Nelson, son of Mrs. W. H. Nelson, Tunica.

The scholarships provide \$100 a month for the students through their medical education and carry the proviso that they will return to Mississippi for their first three years' practice serving in communities of not over five thousand population.

When the five students selected begin the 1933-34 term at Tulane this fall, Mississippi will have fifteen scholarship students at Tulane.

An interesting feature of the selections was that three of the students honored are the sons of widows.

Felix J. Underwood,
Executive Officer.

Jackson,
April 12, 1933.

CENTRAL MEDICAL SOCIETY

The March 21 meeting of the Central Medical

Society was called to order at the Robert E. Lee Hotel at 7:15 P. M., by the president. The minutes were read and adopted as read. The name of Dr. A. G. Wilde was added to the program committee to make up the five called for by the new constitution and by-laws.

An unusual case of early carcinoma of the stomach was presented by Dr. Gordin. In this instance Dr. Gordin was not satisfied to do a radical operation until three or more pathologists separately had named the condition carcinoma, especially because of the early age of the patient. Dr. McCarty reviewed obstetric literature. Dr. T. W. Wilson gave an excellent demonstration on x-ray of the heart. Dr. Joe Green, who was to read a paper on "Proper Neo-Natal Care to Insure Normal Growth and Development," was absent at roll call. Dr. J. P. Wall on "Alcohol" claimed he was a little out of his line but wandered over a good deal of territory in his dissertation on this subject. Free and easy discussion by Drs. Barksdale, Gus Street and Wall closing. Dr. Sparks, guest speaker from the Issaquena-Sharkey-Warren Counties Medical Society, read an excellent paper on "A Brief Discussion of Anuria With a Report of Two Cases." Drs. Miller Henry and Nathan Kendall were elected to membership. Forty-nine members and guests were present.

At the April, 4, 1933, meeting of the Central Medical Society there were 45 members and guests present, an interesting clinic was held. First, a patient was presented by Dr. Dobson on "Luetic Edema of the Tongue." Second, a patient was presented by Dr. T. E. Wilson—diagnosis Stoke's-Adams disease, one and one-half years' observation. The condition was kept under control by ephedrine and barium chloride. Dr. Levi McCarty spoke of a similar case. Dr. McDill presented an excellent x-ray demonstration of chest conditions. Dr. Nathan Kendall on current literature used spinal anesthesia as his subject. Dr. Alsobrook was not present. Dr. W. H. Brandon of Clarksdale read a paper on "Functional Uterine Bleeding." His paper was not discussed. Dr. W. E. Clark read an excellent paper on "Dementia Praecox" which was discussed freely.

Business session: The minutes were read, corrected and adopted. A vote of thanks was extended to Drs. Britt, Rembert and Jones who devised the new constitution and by-laws. Dr. Long reported on meeting place and equipment for the State Medical Association. Drs. Hughes, Van Dyke Hagaman, and Wilson were selected by Dr. Long to assist him in caring for all the needs and wants of the different sections. Dr. Noblin moved that the secretary send a letter to Dr. Swayze, amended by Dr. Sheffield, to send flowers—so ordered. The president asked for nomination of three censors. The following were nominated and elected: Noblin, Jones, and W. H. Watson. Dr. George Adkins was

elected treasurer. Committee on Public Policy and Legislation: Hinds, H. C. Ricks, Chairman; Madison, J. E. Melvin; Rankin, W. H. Watson; Simpson, R. E. Giles; Scott, W. C. Anderson; Yazoo, Gilruth Darrington.

Committee on memoirs, history, publicity: Adkins, Wall and Barksdale.

Adjournment to meet on May 2.

CENTRAL MEDICAL SOCIETY—1932

Nine meetings were held during the year of 1932. The April meeting was postponed because of the State Medical Association meeting in Jackson and there were no meetings in July and August. The largest attendance was 78 at the March meeting and smallest 28 at the June meeting. The average attendance for the year was 45.3 per cent—a mark for every society in the state to shoot at. There were 127 paid up members—more than 70 of these being from Hinds County.

During the year 25 scientific papers were presented. In March, Judge Garland Lyle spoke on "Mississippi Privileged Communications Rule" and Dr. Willis Campbell of Memphis spoke on "Ununited Fractures." In June, Dr. Price of China spoke on "The China Situation." In September, Drs. Crawford of Hattiesburg and Underwood of the State Health Department, and in October, Dr. Stingily of Meridian presented interesting papers. In December, Dr. Walter E. Sistrunk, Jr., of Dallas, Texas, and Dr. B. S. Guyton of Oxford were guests of the society. In addition to these eight visitors, 17 papers were read by members of the society and in addition several case reports were read and patients were presented at various times.

Robin Harris,
Secretary.

Jackson,
April 11, 1933.

CLAIBORNE COUNTY MEDICAL SOCIETY

Recently our Claiborne County Medical Society re-elected officers for the ensuing year.

Dr. W. N. Jenkins will soon be back at his post of duty, after having completed a four months' post graduate course at Tulane.

There never was a better time than NOW for the State Medical Association to memorialize the State Legislature to repeal the unjust and burdensome privilege tax on the practice of medicine.

The present \$22.50 annual privilege tax is a burden to some doctors; and causes some not to affiliate with their county societies and attend the State Medical Association; because they do not feel able to pay the privilege tax and society dues. The former they have to pay.

This tax will annually produce about \$25,000.00; which is enough to produce a nice fat job for several politicians; so they may go galavanting

about the country having a "high-heel" time; while old 'Doc' has to stay at his post plugging away at his "milkin" in single shots; many of which never materialize.

Recently a protracted charity case died and the attending physician was asked to head the list with a nice cash contribution for funeral expenses. We will always have the poor with us and the doctor is certainly doing his part in their behalf. When the people remind us 'Doc's' how wealthy, wise and good we are we sure do swell up.

What fools we "Docs" are. "Ole Doc" is a good fellow.

J. V. May,
President.

Port Gibson,
April 8, 1933.

CLARKE-WAYNE MEDICAL SOCIETY, Albert
Hand, Secretary.....No Report available

CLARKSDALE AND SIX COUNTIES MEDICAL SOCIETY

The high waters are still annoying Tallahatchie County; instead of conditions being much improved by this time, they are much worse. The water is higher at this time than at any time this year.

My letter of March 6 was late to get my plea to the members of the Clarksdale and Six Counties Medical Society so I am making a special plea that all members attend the November meeting. We will have a good meeting as we plan on having some interesting papers and addresses.

I am sure that the members will be interested to know that we cut the dues from seven dollars to five dollars per year. This does not include the banquet meal as heretofore. The society heretofore was unable to ascertain the number who would be in attendance and consequently, as happened at our last meeting, there were about fifteen or twenty more meals ordered than were necessary which had to be paid for. Hereafter each member in attendance will pay for his meal.

Mrs. J. W. Moody motored to Brookhaven, Tuesday morning, to be present for the state convention of the Woman's Missionary Union.

The physicians of Tallahatchie County are having a hard time collecting sufficient funds to meet current expenses but they seem to be cheerful and optimistic. They are like the old negro, they "keep scratchin'." "I hear, Uncle Wash," said Dr. Powell, "that all your folks have the itch." "Yas suh. Doctah," replied Uncle Wash, "de good Lawd has done 'flicted we-all dat way." "And are you doing anything for it Uncle Wash?" "O, yas suh, Doctah yas suh." "What are you doing for relief?" "Why suh, Doctah, we-all is scratchin, suh." We feel that where there are so many dark clouds that somewhere behind it there must be a bright one.

I have a plea to make to the members of our society in a later issue or by a personal letter, so "don't go away." I am anxious that you come to our next meeting. If you are unable to get your dues to Dr. Harrison before that time, be sure to come and pay up at that time and bring a new member or an application with you. We need you and you need us.

See you in Jackson May 9, "So long until . . ."

J. W. Moody,
President.

Clarksdale,
April 8, 1933.

CLARKSDALE AND SIX COUNTIES MEDICAL SOCIETY

The sixty-second semi-annual session of the Clarksdale and Six Counties Medical Society was called to order March 15, at 7 o'clock in the Alcazar Hotel dining room, Clarksdale, Dr. J. W. Moody, president, presiding.

After dinner was served, the business session was opened by the president at which time the secretary, Dr. V. B. Harrison, read the minutes of the last meeting, which were adopted as read. A resolution to reduce the present dues of seven dollars to five dollars per annum was introduced by the secretary. After a lively discussion, the resolution was passed by a vote of 14 to 4. The resolution provides that all costs of banquets and meetings in the future shall be raised by assessment instead of being included in the dues as was the case in the past.

Next in order of business was the election of delegates to the State Association with the following results: Cohoma County—Dr. A. J. Brown, Delegate, Dr. A. G. Everett, Alternate; Tallahatchie County—Dr. J. D. Biles, Jr., Delegate; Dr. J. G. Backstrom, Alternate; Tunica County—Dr. W. H. Williams, Delegate, Dr. J. W. Moody, Alternate; Quitman County—Dr. E. A. McVey, Delegate, Dr. V. D. Franks, Alternate.

After the business session, the Society took up the scientific session. Dr. Henry Hill, Memphis, gave an address on "Fractures of the Femur," which was illustrated by motion pictures. He particularly stressed the use of axis traction with calipers and plaster casts. He stated that he reduced 70 per cent of the fractures by this method. The paper was discussed by Dr. Frank H. Hagaman of Jackson. The second paper on the program was "Resection of Presacral Nerves for Dysmenorrhea," by Dr. Frank H. Hagaman and was illustrated by lantern slides. The paper was discussed by Dr. W. H. Brandon and Dr. A. J. Brown of Clarksdale. The third paper on the program was "Hypothyroidism," by Dr. W. H. Brandon, who differentiated true hypothyroidism

from myxedema and associated thyroid disfunctions. There was no discussion of this paper. The fourth paper on the program was "Head Injuries," by Dr. J. D. Biles, Jr., of Sumner. The paper was discussed by Dr. W. S. Slaughter, of Jonestown. The fifth paper on the program was "Diet in Health and Deficiency Diseases," by Dr. B. O. McDaniels, Clarksdale. There was no discussion of this paper.

There being no further business, the meeting adjourned.

V. B. Harrison,
Secretary.

Clarksdale,
March 22, 1933.

DELTA MEDICAL SOCIETY

The Delta Medical Society held its semi-annual meeting in the city hall, Greenville, April 12, with 125 physicians and visitors present. The Women's Auxillary held its afternoon meeting in the Methodist Church Educational Building and dinner and entertainment in the Legion House at 7 P. M. with good attendance.

DELTA MEDICAL SOCIETY

The Delta Medical Society held its semi-annual meeting in the city hall, Greenville, April 12, with 125 physicians and visitors present. The Women's Auxillary held its afternoon meeting the Methodist Church Educational Building and dinner and entertainment in the Legion House at 7 P. M. with good attendance.

The attending physicians were called to order at 2 P. M. by President J. C. Higdon, Belzoni. The opening program included: Invocation by Rev. J. W. Ward, Greenville; Address of welcome by Mayor E. G. Ham, Greenville; response by Dr. E. R. Nobles, Rosedale.

After the reading and adoption of Secretary F. M. Acree's good report, a program of good papers and live discussion followed:

1. Cholecystitis, Choledochitis, and Cholangitis.—Dr. J. W. Jackson, Belzoni.

2. Kidney Infections.—Dr. Joseph Hume, New Orleans, La. Discussed by Drs. A. G. Payne and G. Y. Gillespie, Jr.

3. Chronic Gonorrhea.—Dr. B. H. Booth, Drew. Discussed by Drs. Thomson, R. C. Smith, L. B. Otken and Joseph Hume.

4. The Work of the Community Hospital.—Dr. J. G. Garner, Columbia, President, Mississippi State Hospital Association. Discussed by Drs. E. R. Nobles, L. B. Otken, G. M. Barnes, B. H. Booth and Felix J. Underwood.

5. Present Trends of Public Health.—Dr. Felix J. Underwood, Jackson.

6. Neuralgia of the Fifth Cranial Nerve.—Dr. L. C. Davis, Greenville.

The membership attendance was full except for Leflore County which was occasioned by high water. The meeting was graced by the presence and participation of the following distinguished guests: Dr. Felix J. Underwood, Dr. T. M. Dye, Dr. E. L. Wilkins, Dr. Joseph Hume, Dr. J. G. Gardner, Dr. Gann of Little Rock, Ark., and others.

An elegant stag supper and smoker were staged at the Country Club by our charming hosts. The menu was satisfying, the music choice, various and pleasing, the occasion delightful and long to be remembered.

J. W. Lucas,
Councilor, First District.

Moorhead,
April 12, 1933.

DESOTO COUNTY MEDICAL SOCIETY, L. L.
Minor, Secretary—No report available.

EAST MISSISSIPPI MEDICAL SOCIETY

I feel that we had one of the most successful years in the history of the East Mississippi Medical Society and this was made possible through the co-operation of our very efficient secretary, Dr. T. L. Bennett, and myself. We tried to impress upon each member that he must play his part in order that we have what we most desired—and that was only to have one of the best years our society had ever had, but to continue to build up one of the best societies of its kind in the state. I want to take advantage of this opportunity to thank every member of the Society for helping us to accomplish this one thing. Without a single exception each member called on for a paper came forward with his part on the program. This statement also applies to visiting doctors, who cheerfully helped us out on every occasion they were requested to do so. As you know, this is a very exceptional record.

We have been following a precedent established by Dr. E. F. Howard, who was president of the Mississippi State Medical Association in 1930 and 1931, and that was to elect vice-presidents whom we thought would be capable and efficient should they become eligible for election to the presidency. In order to demonstrate that eligibility, these vice-presidents were given a duty to be performed upon a competitive basis. Each vice-president was responsible for the membership from his county, and the one who had the highest membership from a percentage standpoint was selected for election as incoming president. We think this has worked out very satisfactorily, and I believe the principle is right. At least we shall then have a president who

will take an interest in the society, and this is very necessary if the society is to continue its growth.

J. S. Hickman,
President.

Jackson,
March 27, 1933.

EAST MISSISSIPPI MEDICAL SOCIETY

The East Mississippi Medical Society will meet on the mezzanine floor of the Lamar Hotel, Meridian, Thursday afternoon, April 20. The following program will be rendered:

Trauma of the Foetus with Results to Child.—
Dr. W. H. Banks, Philadelphia.

Discussion by Dr. William J. Anderson, Increase.
Diphtheria and Vincent's Angina.—Differential
Diagnosis.—Dr. Homer Dupuy, New Orleans, Louisiana.

Discussion by Dr. H. L. Arnold.

Acute Abdomen.—Dr. K. T. Klein, Meridian.

Discussion by Dr. H. S. Gully.

To our president, Dr. James M. Acker, Jr., Aberdeen, and to our president-elect, Dr. J. W. D. Dicks, Natchez, East Mississippi Medical Society sends GREETINGS. To Dr. Acker we are grateful for the constructive and efficient manner in which he has guided the activities of the medical profession during his term. He has proven a most capable leader. To Dr. Dicks predicting and wishing him a most successful administration and promising our most hearty support and co-operation.

T. L. Bennett,
Secretary.

Meridian,
April 9, 1933.

EAST MISSISSIPPI MEDICAL SOCIETY

The East Mississippi Medical Society wishes to announce that a post graduate medical institute will be held at the Lamar Hotel in Meridian, Tuesday, June 6, to Friday, June 9, inclusive.

The institute will be conducted by two outstanding men in the medical field, Dr. Joseph Colt Bloodgood of Baltimore, Maryland, and Dr. George Herrmann of Galveston, Texas. Dr. Bloodgood is well known both here and on the continent where he has delivered several lectures on his researches on cancer control. Dr. Herrmann is professor of clinical medicine at the University of Texas, editor of the American Journal of Syphilis and associate editor of Laboratory and Clinical Medicine, also physician to the John Sealy Hospital in Galveston, Texas.

The program will consist of four clinics and nine lectures and is arranged as follows:

Tuesday, June 6

10:00 A. M.—Clinic—to be conducted by Dr. Herrmann.

Subject: Endocrine Disturbances—General Medicine.

4:00 - 6:00 P. M.—Lecture—by Dr. Bloodgood.
Subject: Breast Cancer (lantern slide lecture).
7:30 - 9:30 P. M.—Lecture—by Dr. Herrmann.
Subject: Modern Concepts of Heart Disease, Definition, Classification, Diagnosis and Criteria.
Special lecture to the Dental Society—by Dr. Bloodgood.
Subject: Cancer of the Jaw (lantern slides).

Wednesday, June 7

10:00 A. M.—Clinic—to be conducted by Dr. Bloodgood.
Subject: Breast Cancer, Cases and Suspects.
4:00 - 6:00 P. M.—Lecture—by Dr. Herrmann.
Subject: The Disorders of the Heart Beat—Discussion of Each; Differential Diagnosis and Treatment, including that of Adams-Stokes Syndrome (lantern slides).
7:30 - 9:30 P. M.—Lecture—by Dr. Bloodgood.
Subject: Prevention of Cancer in Mothers.

Thursday, June 8

10:00 A. M.—Clinic—to be conducted by Dr. Herrmann.
Subject: Nephrosis and Nephritis.
4:00 - 6:00 P. M.—Lecture—by Dr. Bloodgood.
Subject: Cancer of the Bones and Joints.
7:30 - 9:30 P. M.—Lecture—by Dr. Herrmann.
Subject: Rheumatic Syphilitics; Hypertension as Heart Disease, Coronary Sclerosis and Thrombosis.

Friday, June 9

10:00 A. M.—Clinic—to be conducted by Dr. Bloodgood.
Subject: Cancer of the Bones and Joints—Cases and X-ray Plates.
4:00 - 6:00 P. M.—Lecture—by Dr. Herrmann.
Subject: Treatment of Patients with Heart Disease With and Without Congestive Failure.
7:30 - 9:30 P. M.—Lecture—by Dr. Bloodgood.
Subject: Education of Public and Profession of Medicine and Dentistry on Prevention and Cure of Cancer.
(Public lecture).

All physicians are urged to be present at every meeting possible, for these two eminent men are sure to provide much material of interest and value.

Any physician wishing to present cases at the clinics should get in touch with Dr. D. V. Galloway, Secretary of the Medical Institute Committee, at once.

D. V. Galloway,
Secretary, Medical Institute Committee.

Meridian,
April 10, 1933.

HARRISON-STONE-HANCOCK COUNTIES
MEDICAL SOCIETY

April meeting will be held at the King's Daugh-

ters' Hospital, Gulfport, Wednesday, April 5, 1933, at 7:30 P. M.

Paper _____ by Dr. E. E. Sheely
Subject _____ to be announced
Biloxi,

April 1, 1933.

Year of 1932:

Regular meetings	11
Special meetings	2
Social nights	1
Number of paid-up members	46
Average percentage attendance at meetings ...	50.1
Members with 100 per cent attendance	7
R. W. Burnett, J. A. McDevitt, E. C. Parker, H. P. Rafferty, E. A. Trudeau, E. B. Van Ness, D. J. Williams.	
Members with 60 per cent or better	21
Members attending no meetings	7
Number of visitors during year	20
Largest meeting	41
Smallest meeting	17
Number of papers read	11
Number of clinics	3

Most beneficial event of year was the series of lectures on obstetrics given by Dr. McCord.

Outstanding recommendations for the betterment of Mississippi medicine:

Do away with the present inadequate five charity hospitals and prorate the funds to local hospitals in each county. In this way all counties and not just a few will be served.

That the office of coroner must be held by a licensed M. D.

E. A. Trudeau,
Secretary.

Biloxi,
April 8, 1933.

HOMOCHITTO VALLEY MEDICAL SOCIETY, Dr. W. K. Stowers, Secretary—No report available.

ISSAQUENA-SHARKEY-WARREN COUNTIES
MEDICAL SOCIETY

The regular monthly meeting of the Issaquena-Sharkey-Warren Counties Medical Society was held on Tuesday, April 11, at Hotel Vicksburg, Vicksburg, with 17 members present, and Drs. W. H. Watson, Pallahatchie, F. M. Acree, Greenville, T. B. Lewis, Greenville, F. J. Underwood, Jackson and William P. Robert, Vicksburg, guests. Dr. P. S. Herring, president, presided. After a supper, the following scientific program was presented:

1. A New Antimalarial.—Dr. F. M. Acree.
Discussed by Drs. P. S. Herring, H. H. Haralson, G. M. Street, S. W. Johnston, and W. H. Scudder. Dr. Acree closed.

2. Diagnosis and Treatment of Malignancies of the Breast.—Dr. G. M. Street.

Discussed by Drs. T. P. Sparks, Jr., P. S. Herring,

L. S. Lippincott, and G. W. Gaines. Dr. Street closed.

Dr. W. H. Watson, Councilor of the Fifth District, Mississippi State Medical Association, made an official visit and discussed the present state of the District and organization.

Dr. T. P. Sparks, Jr., reported on his recent visit to the Central Medical Society where he was guest speaker.

The following resolutions were presented and unanimously adopted:

WHEREAS it is our belief that the lawful sale of 3.2 per cent beer would be beneficial to the physical and moral condition of the people of Mississippi, be it, therefore,

RESOLVED by the Issaquena-Sharkey-Warren Counties Medical Society in regular meeting assembled, that its members favor the immediate modification of the present prohibition laws of the State of Mississippi so as to permit the sale of beer subject to the restrictions of the Federal Laws, and,

WHEREAS spiritous liquors are known to be of value in the treatment of certain disease conditions and are so recognized by the Federal Government, be it, therefore, further

RESOLVED that the laws of the State of Mississippi be further modified to permit physicians duly licensed to practice medicine in the state to prescribe spiritous liquors to patients in accordance with accepted medical practice and the Federal Laws, and, be it further

RESOLVED that a copy of these resolutions be sent to the Governor of this State, to our State Senator and our Representatives, asking and urging their active efforts to secure the necessary modifications of existing laws to bring about the above desirable changes; and to the press, and, be it further

RESOLVED that our representatives in the House of Delegates of the Mississippi State Medical Association are hereby instructed to present similar resolutions at the next meeting of the Association and to use every effort to secure their passage and the active co-operation of the State Association.

Unanimously adopted.

A letter was received from Dr. W. E. Johnston, now of the United States Marine Hospital, Chelsea, Mass., tendering his resignation as vice-president of the Society. Dr. R. A. Street, Jr., Vicksburg, was elected to fill the unexpired term of Dr. Johnston.

Dr. William Pierre Robert, Vicksburg, was unanimously elected to membership.

There will be no meeting of the Society in May because of the meeting of the Mississippi State Medical Association in Jackson.

For the next meeting on June 13, the program will be in charge of Dr. E. H. Jones, Vicksburg,

Chairman; Dr. J. A. K. Birchett, Vicksburg, Dr. P. S. Herring, Vicksburg; Dr. D. A. Pettit, Vicksburg, and Dr. E. B. Stribling, Rolling Fork.

Leon S. Lippincott,
Secretary.

Vicksburg,

April 12, 1933.

JACKSON COUNTY MEDICAL SOCIETY, J. N. Rape, Secretary—No report available.

KEMPER COUNTY MEDICAL SOCIETY, V. M. Creekmore, Secretary—No report available.

LEAKE COUNTY MEDICAL SOCIETY, I. A. Chadwick, Secretary—No report available.

NORTHEAST MISSISSIPPI THIRTEEN COUNTIES MEDICAL SOCIETY, J. M. Acker, Jr., Secretary—No report available.

NORTH MISSISSIPPI MEDICAL SOCIETY

The quarterly meeting of the North Mississippi Medical Society was held at New Albany, March 22, at 1:30 P. M., in the Baptist Church. The program announced was as follows:

Invocation.—Rev. J. P. Kirkland.

(1) A Motion Picture Study of the Heart in Health and Disease.—Dr. Lyle Motley, Memphis, Tennessee.

(2) Umbilical Hemorrhage.—Dr. R. G. Grant, Holly Springs.

Discussion opened by Drs. C. M. Murry and R. J. Criss.

(3) Childhood Type Tuberculosis.—Dr. W. A. Tommer, Tupelo.

Discussion opened by Drs. N. G. Gholson and F. E. Linder.

(4) Diphtheria.—Dr. I. B. Trapp, New Albany.

Discussion opened by Drs. D. C. French and R. M. Adams.

(5) Special Feature—Thirty Minutes of Thrills—A Motion Picture.

Business Session.

Dr. G. A. Brown, Water Valley is president and Dr. A. H. Little, Oxford, is secretary.

E. S. Bramlett,
County Editor.

Oxford,

March 26, 1933.

PIKE COUNTY MEDICAL SOCIETY

The Pike County Medical Society had its regular monthly meeting March 2, at 6:00 P. M. After dinner the meeting was called to order and the minutes of the last meeting were read. A letter was then read from Dr. Robin Harris of the Central Medical Society in which he asked that we swap essayists with the Central Society once during the coming year. The Society decided to accept the invitation.

Dr. O. W. Bethea then addressed the society on the subject "Diagnosis of Conditions of the Chest."

Dr. Bethea illustrated his lecture by very interesting lantern slides.

The Society adjourned after an expression to Dr. Bethea was made by several members of the Society. The following physicians were present: Dr. Bauer, Dr. W. O. Biggs, L. W. Brock, R. H. Brumfield, W. F. Cotton, E. M. Givens, T. Paul Haney, Jr., W. C. Hart, B. J. Hewitt, T. E. Hewitt, Thomas Purser, Gladys Ratcliff, J. M. Smith, J. C. Wallace, Dr. Harvey of Tylertown, Dr. Savage of Brookhaven.

The April meeting of the Society was held Thursday, April 6, at 7:00 P. M. in the Methodist Church. The meeting was called to order by Dr. Otis Biggs. The reading of the minutes was dispensed with. A letter from Dr. Bethea was read by the secretary; also a letter from Dr. Lawrence T. Royster in which he expressed his regrets that he could not be with the Society at its regular May meeting. A letter from Dr. Stennis was read, and also, a letter from Dr. T. M. Dye. There was no further business to come before the Society.

Dr. B. S. Guyton then addressed the Society on "Conditions of the Eye and Ear That Are of Special Interest to the General Practitioner." Dr. Guyton discussed such subjects as tuberculosis of the external ear canal, diagnosis between abscess behind the ear and mastoid, conditions of the ear drum, explanation of how to open a mastoiditis, discharging ear, and follicular conjunctivitis. His talk was a very beneficial one. After an expression of appreciation to Dr. Guyton by Dr. Otis Biggs, the Society was adjourned.

The following men were present: Drs. H. L. Bauer, W. O. Biggs, L. W. Brock, R. H. Brumfield, W. F. Cotton, E. M. Givens, T. Paul Haney, Jr., B. J. Hewitt, T. E. Hewitt, Thomas Purser, Gladys Ratcliff, G. W. Robertson, M. D. Ratcliff, Harrison Butler, Paul Jackson and Dr. Fairfax.

This Society wishes to express its sincere appreciation to the outgoing president, Dr. James M. Acker, Jr., of Aberdeen, for his untiring efforts as president during the past year. We feel that Dr. Acker has done a splendid service to the society and to the state. We also wish to express greetings to our neighbor and friend, Dr. J. W. D. Dicks of Natchez, our incoming president. Knowing Dr. Dicks as we do, we realize that much is in store for the medical profession of Mississippi during the incoming year.

T. Paul Haney, Jr.,
Secretary.

McComb,
April 10, 1933.

SOUTH MISSISSIPPI MEDICAL SOCIETY, J. P. Culpepper, Secretary—No report available.

TATE COUNTY MEDICAL SOCIETY, J. S. Eason, Secretary.—See Tate County News.

TRI-COUNTY MEDICAL SOCIETY, H. R. Fairfax, Secretary—No report available.

WINONA DISTRICT MEDICAL SOCIETY, E. W. Holmes, Secretary—No report available.

ADAMS COUNTY

Through the efforts of Mrs. Messie Parson, a number of water glasses, sheets and pillow cases were donated to the Natchez Charity Hospital this month. Contributions of fifty cents or more were made to Mrs. Parsons, who purchased the sheeting by the bolt and with the help of her daughter, Mrs. Frank Parsons, made the sheets.

Among the members of the medical corps motor-ing to Natchez on March 21, to attend the staff meeting at the Natchez Charity Hospital, were Dr. Stanley Peterman and Dr. Henry of Crowley, La., who were guests for a short visit in the home of Dr. Peterman's relatives, Mr. and Mrs. Rudolph Viener.

Dr. Peterman will be pleasantly remembered in Natchez on many previous visits in his boyhood days as a guest in the Viener home and later as an interne at the Natchez Charity Hospital.

A very interesting and instructive talk by Dr. Homer A. Whittington, assistant superintendent at the Natchez Charity Hospital, featured the weekly luncheon meeting of the Natchez Rotary Club on March 22.

Dr. Whittington was on the program to give his autobiography but after touching only briefly on his early and educational life he devoted his time to a discussion of the Natchez Charity Hospital.

In his remarks the young physician, whose home is in Franklin county, stated that during the past year there were 5,322 patients admitted to the local institution.

With such a large number of patients, Dr. Whittington stated that the hospital was very efficiently operated despite the fact that their appropriation has been substantially reduced.

At present the institution receives a total of \$32,500 on which to operate. Of this amount \$22,500 comes from the State of Mississippi, five thousand is given by the City of Natchez, and five thousand is given by the County of Adams.

The young physician said that the successful operation of the hospital was also due in a large measure to the splendid spirit of co-operation shown by Natchez physicians. He stated that practically all physicians of the city have offered their services and gave liberally of their time and advice.

Local physicians and surgeons and members of the staff of the Natchez Charity Hospital attended a very instructive and interesting staff meeting at the Natchez Charity Hospital on March 21.

At this time Drs. Peterman and Henry of Crowley, La., gave a very interesting illustrated lecture. "The Thyroid Gland" was the subject of the lec-

ture which proved very instructive to everyone attending.

Another feature of the program which was presented at the meeting was the interesting paper on "The Use of Radium", which was given by Dr. J. S. Ullman of this city.

L. Wallin,
County Editor.

Natchez,
March 31, 1933.

ALCORN COUNTY

We have fourteen doctors in Alcorn County. Eleven live in the city of Corinth and three at different points in the county.

Dr. M. W. Robinson is county health officer and councilor for the third district of the Mississippi State Medical Association. Dr. J. R. Lanning is city health officer for the city of Corinth. He also is appointed by the board of supervisors to do county practice. Dr. W. W. McRae, Dr. M. H. McRae and Dr. Dabney Hurt are associated and have offices in McRae Hospital and all do surgery and general practice. Drs. Norwood and Gilbert are associated and do surgery at Corinth Hospital, also general practice. Drs. Johns and Hamrich do eye, ear, nose and throat practice exclusively.

Dr. J. H. Hughes does general practice at Kosuth, Dr. G. W. Googe does general practice at Rienzi and Dr. R. E. Honnoll does general practice at Biggersville. Dr. S. L. Stephenson, who resides in Corinth, is specializing in pediatrics.

We have no city or county organization or hospital staff meetings. We are all members of the Northeast Mississippi Thirteen Counties Medical Society and all speak in passing, in fact, there is a fine spirit of co-operation between the doctors. We are all with our state president, Dr. Acker from Aberdeen. We believe Dr. Acker is a princely gentleman, a competent physician and surgeon and a great promoter of organized medicine. We also admire our president for the ensuing year, Dr. Dicks from Natchez. We believe he is the man for the place and pledge our support for his administration. We are looking forward to our May meeting at Jackson and hope to grasp hands with you all during that splendid get-together.

James R. Hill,
County Editor.

Corinth,
March 20, 1933.

AMITE COUNTY, P. J. Jackson, Editor.—No news in nine months.

ATTALA COUNTY, C. A. Pender, Editor.—No news in six months.

BENTON COUNTY, F. Ferrell, Editor.—No news in two years.

BOLIVAR COUNTY, C. W. Patterson, Editor.—Missing.

CALHOUN COUNTY, W. J. Aycock, Editor.—No news in six months.

CARROLL COUNTY, J. P. T. Stephens, Editor.—No news in two years.

CHICKASAW COUNTY, W. C. Walker, Editor.—No news in 16 months.

CHOCTAW COUNTY

I have recently made a trip to Alabama. The doctors over there are in about the same condition that we are—feeling the depression.

A copy of "The Mississippi Doctor" reached me a few days ago. I am glad this journal is published in our state. It deals with the country doctor's problems more than most publications.

Some of the physicians from this section attended the last meeting of the Mid-South Post Graduate Assembly in Memphis. In my opinion, we have no better association.

J. James,
County Editor.

Ackerman,
April 3, 1933.

CLAIBORNE COUNTY, W. N. Jenkins, Editor.—No news in eight months.

CLARKE COUNTY, B. F. Hand, Editor.—No news in two years.

CLAY COUNTY, S. R. Deanes, Editor.—No news in three months.

COAHOMA COUNTY, A. C. Everett, Editor.—No news in two years.

COPIAH COUNTY, W. L. Little, Editor.—No news in seven months.

COVINGTON COUNTY, D. T. Allred, Editor.—No news in two years.

DESOTO COUNTY

Dr. C. M. Hammond of Wall is the inventor of a respirator. The effectiveness of this new life saving apparatus has been demonstrated at the Baptist Memorial Hospital, Memphis, Tennessee. It has received many favorable comments. The doctor has worked on this apparatus for a number of years, and is now making arrangements to manufacture it.

Dr. A. L. Emerson of Hernando and his brother, the Hon. C. E. Emerson, attended a meeting recently of the trustees of the Baptist Memorial Hospital, Memphis, Tennessee, of which they are members.

Delegate and alternate delegate, Drs. A. L. Emerson and A. J. Weissinger hope to attend the meeting of the State Association in Jackson, May 9, 10, 11, 1933.

Dr. D. C. Funderburke is actively engaged with

his clinic at Olive Branch. The doctor was recently elected to high office in his Masonic lodge.

Dr. and Mrs. O. C. Brewer of Eudora have returned from a visit to their old home in south Mississippi.

L. L. Minor,
County Editor.

Memphis,
Route 4,
April 8, 1933.

FOREST COUNTY, C. C. Buchanon, Editor.—Missing.

FRANKLIN COUNTY, C. E. Mullins, Editor.—No news in two years.

GEORGE COUNTY, R. F. Ratliffe, Editor.—No news in two years.

GREEN COUNTY, Aristophane Graham, Editor.—No news in two years.

GRENADA COUNTY

Only a line to answer "roll call".

Nothing of particular interest has happened since my last report. The health of our county is exceptionally good. The doctors are all at their posts; they and their families well, no changes in our personnel, no deaths or births or removals.

We are looking forward to the state meeting next month and anticipating a good meeting.

More anon.

J. T. Brown,
County Editor.

Grenada,
April 9, 1933.

HANCOCK COUNTY, D. H. Ward, Editor.—No news in four months.

HARRISON COUNTY, G. F. Carroll, Editor.—No news in five months.

HINDS COUNTY

The Mississippi State Medical Association has had a good year. Everything has run along smoothly and well. Our appreciation to Dr. Acker cannot be expressed in words. He has made an excellent president and our thanks are to him.

Congratulations to Dr. J. W. D. Dicks, our incoming president for next year. May every one give their wholehearted support during the next year and great will be the reward, another successful year's work.

The staff of the Baptist Hospital held its meeting at the hospital the last week in March. The attendance was exceptionally good, as was the meal and program.

The staff of the Jackson Infirmary met last Tuesday evening. The usual good meal was served and a most interesting program was enjoyed by all.

Dr. L. B. Moseley spent last week-end in Mobile

visiting the various places of interest, especially the flower gardens which are now in bloom. Dr. Moseley is very much interested in Nature you know.

Everybody be on hand in Jackson in May to make the meeting of the State Medical the best ever. See you in Jackson!

W. F. Hand,
County Editor.

Jackson,
April 6, 1933.

HOLMES COUNTY

Dr. W. B. Hyde of Durant has just returned from a week's visit to his old home in Alabama.

Dr. A. M. Phillips of Euology, who had an apopleptic stroke several weeks ago, has made considerable improvement.

Dr. W. O. Mabry of Goodman is spending a week in St. Louis on a visit.

Dr. R. C. Elmore of Durant was called to Vicksburg on Sunday, April 2, on account of the serious illness of a relative.

At the March meeting of the Holmes County Community Hospital staff, the following program was announced for the April meeting:

"Review of the Literature on Surgery."—Dr. P. B. Brumby.

"Review of the Literature on Medicine."—Dr. R. C. Elmore.

"Review of the Literature on Genito-Urinary Diseases."—Dr. J. J. Kazar.

"Some Obstetrical Difficulties."—Dr. J. S. Rosamond.

R. C. Elmore,
County Editor.

Durant,
April 9, 1933.

HUMPHREYS COUNTY, G. M. Barnes, Editor.—No news in eight months.

ISSAQUENA COUNTY

The horde of doctors in Issaquena have been living off the fat of the land since the R. F. C. began operations in our county. Those of us who heretofore have given both our services and our medicines free of charge to all comers are now being paid for our medicine by the R. F. C.

In some instances we are receiving pay for our visits at the rate of \$1.33 per visit. For this we are thankful. True there are ups and downs to it. Some visits are far, and some are near. One doctor drove five miles in his car to the jumping off place. Then he put on his rubber boots and walked a mile farther to get to the patient. Another made a night trip out eight miles to attend a complicated case of labor, adherent placenta, and received the usual \$1.33 for it. Probably better this than noth-

ing. With their limited means the R. F. C. cannot afford to give more.

The country is flat broke. No money to pay nothing. But the country doctor **has** to go to these cases. He cannot turn them down because they have no money, and never will have any. He cannot tell them to go get another doctor, because there ain't no other doctor. He cannot dodge the responsibility.

W. H. Scudder,
County Editor.

Mayersville,
March 10, 1933.

ITTAWAMBA COUNTY, S. L. Nabors, Editor.—No news in two years.

JACKSON COUNTY

Congratulations to Dr. Acker who has worked so faithfully to keep up interest in the component societies. I believe that he has visited more of the societies than most of our former presidents. We are sorry that he did not get down this far.

Best wishes to Dr. Dicks as we pledge him our support during the next year, and we hope that he will visit us during his term of office.

Jackson County Medical Society will be represented at the meeting of the association by our present president, Dr. F. O. Schmidz, who also is our youngest member and has not missed a meeting of the society or staff meeting at the Jackson County Hospital since he cast his lot among us last July. So you see we believe in training them up in the way that they should go so that they may carry on as we older ones pass on.

We have had wonderful interest and attendance both at the staff and society meetings during the last year for which we feel proud. We hold our staff meetings on the second Thursdays at 7:30 P. M., at the hospital and the society meetings on the same days in March, June, September and December at the same place and hour and we invite any of the members of the association to attend should they be so fortunate as to be passing this way.

We saw Dr. McArthur of Moss Point the other day and from his demeanor we predict that about the next time that we hear from him that he will be making his usual spring visit to the perch fishing grounds.

If those in authority could only realize the great amount of very necessary service the county hospitals are rendering the nearby people, especially the needy, they would certainly be more generous with their allowance. We believe in doing the things that will benefit the most people, so we suggest that the House of Delegates make a desperate effort to see that the county hospitals have more aid. Our little hospital has just about used up its allowance and the year so young yet.

As everybody except the doctors are getting aid in some way, why can't the doctors be relieved of the privilege tax license? How about it, doctors?

Yours for more county hospitals and more aid.

S. B. McIlwain,
County Editor.

Pascagoula,
April 10, 1933.

JASPER COUNTY, J. B. Thigpen, Editor.—No news in six months.

JEFFERSON COUNTY, R. B. Harper, Editor.—No news in two years.

JEFFERSON DAVIS COUNTY, G. C. Terrell, Editor.—No news in seven months.

JONES COUNTY, J. E. Green, Editor.—No news in two months.

KEMPER COUNTY

The friends of Dr. C. M. Gully of DeKalb, congratulate him on the birth of his first grandson, who has been named Virgil Samuel Gully, Jr.

The majority of the members of Kemper County Medical Society have recently petitioned the Mississippi State Medical Association for permission to join the East Mississippi Medical Society.

A. M. McCarthy,
County Editor.

Electric Mills,
April 9, 1933.

LAFAYETTE COUNTY, E. S. Bramlett, Editor.—No news in five months.

LAMAR COUNTY, L. L. Polk, Editor.—Missing.

LAUDERDALE COUNTY, C. T. Burt, Editor.—No news in three months.

LAWRENCE COUNTY, B. S. Waller, Editor.—No news in six months.

LEAKE COUNTY, I. A. Chadwick, Editor.—No news in nine months.

LEE COUNTY

The reason Lee County has been missing for the past months is because of the first mistake of our new president in selecting the editor for Lee county. And I think he should be fined one case of this new beer for Dr. Bryan (my good friend and editor for Monroe county) and myself.

Was glad to see our good friend and colleague, Dr. M. M. McMillan, out and going since being operated on in St. Louis for cancer of trachea, although he has no voice but talks real well.

The staff of the Tupelo Hospital was honored with an interesting paper by Dr. W. H. Sutherland of Booneville at the March meeting.

The doctors do not stir enough now to create news of interest and the reason has been given that if they get out of the way that a cash call might come in and the other fellow would get it.

And they are darn scarce now, so they say, I really don't know myself.

Our society met in Macon in March and one of our Lee County doctors delivered one of the most interesting and instructive papers that has ever been delivered to our society and did it in such a masterly way. He was Dr. E. C. Lilly of Tupelo and his subject was herpes zona of the face. I wish every doctor in the state could hear this paper.

Dr. Joe L. Kellum is now located in Baldwin and is doing his stuff in the modern and scientific style. This I hope will be of interest to his many OLD MISS. friends and classmates and again we can say OLD MISS. put out another good man.

Mr. Editor you ask me to give you a report as member of the hospital committee but we have all combined our reports and I think it is a more interesting and a better report than a separate report from each member.

R. B. Caldwell,
County Editor.

Baldwin,
April 9, 1933.

LEFLORE COUNTY

Dr. Carl Kirby of Lulu and Grover Kirby of Tutwiler visited their old home at Money on March 24.

Dr. and Mrs. Cleve Davis of Itta Bena spent the last week of March on the Mississippi coast, guests of Judge Kimbrough.

Dr. J. P. Kennedy spent the first week of April on the coast.

Dr. Geo. Baskervill spent Monday, April 3, in Memphis.

The homes of Drs. W. E. Denman and R. B. Yates were slightly damaged by the tornado that passed over the western part of Greenwood on March 31.

We regret the illness of Dr. J. E. Dunlap of Schlater, and hope he will soon be well again.

Dr. R. B. Yates and J. E. Dunlap report a case of terata katadidyma, a negro baby with two heads, delivered by caesarian section. The baby was dead, and mother died 7 days later.

The Greenwood-Leflore Hospital, owned jointly by the city and county, formerly the King's Daughters' Hospital, has just been repainted and improved very much in every way.

Dr. F. M. Sandifer has a private hospital for negroes and Dr. R. B. Yates is now building a negro hospital which will be used for charity and also private cases.

We are looking forward with pleasure to the meeting of the Delta Medical Society at Greenville, April 12. Leflore County physicians send greetings to the president and president-elect of our State Association.

W. B. Dickins,
County Editor.

Greenwood,
April 6, 1933.

LINCOLN COUNTY, W. H. Frizell, Editor.—No news in four months.

LOWNDES COUNTY

The Columbus Hospital which has been closed since the tragic death of its late owner, Dr. W. C. Brewer, reopened its doors April 1, under the management of Dr. Thomas Wolford of Birmingham, Ala., who will be surgeon in charge and also do general practice. Dr. Wolford comes to the Columbus Hospital after several years of work in the hospitals of Birmingham and Chicago. He will have associated with him Dr. D. E. Staton and Dr. R. C. Molloy who were associated with Dr. Brewer during his operation of the hospital. Dr. Wolford states that Miss Elizabeth Brown will retain her position as secretary of the institution and that he will use graduate nurses exclusively.

Miss Juanita Hamm, who was head nurse of the Columbus Hospital during its former administration, will continue temporarily in the same capacity, after which she will return to Birmingham, Ala., making that city her future home.

Drs. P. L. Fite and W. L. Stallworth attended the South Eastern Surgical Conference during the month of March. The conference, which met in Atlanta, Ga., was reported as helpful, successful, and very enjoyable.

Dr. D. E. Staton and his many friends were surprised and gratified when news came that a recent article by Dr. Staton on "Common Ear Diseases" had been reproduced in the journal "Practical Medicine" of Delhi, India.

Dr. James W. Lipscomb, Jr., graduate of the University of Tennessee, interne, Hillman Hospital, Birmingham, Ala., one year; McLeod Hospital, Florence, S. C., one year; Memorial Hospital, New York City, six months; and resident surgeon, the Jamacia Hospital, Richmond Hill, N. Y., one and one-half years; will locate in Columbus, July 1, and be associated with Dr. P. L. Fite in the Fite Hospital, limiting his practice to surgery and obstetrics. Dr. Lipscomb, Jr., occupies an unique position in the annals of local medicine, he being the fourth successive Dr. Lipscomb to practice his profession in Columbus, his great grandfather, his grandfather, and his father (still in active practice) having served the people of Columbus and Lowndes county continuously for a period of one hundred and one years.

Mrs. D. E. Staton, wife of Dr. D. E. Staton, entertained with a delightful twelve o'clock luncheon Monday, having as guests several of the physicians of the city to meet Dr. Thomas Wolford, the new owner of the Columbus Hospital.

Dr. E. Q. Withers, who has had offices at the Fite Hospital for the last few years, will remove

to offices out in the city, the place and time to be announced later.

J. W. Lipscomb,
County Editor.

Columbus,
April 4, 1933.

MADISON COUNTY, Robert Smith, Editor.—No news in ten months.

MARION COUNTY, J. G. Gardner, Editor.—No news in nine months.

MARSHALL COUNTY, D. R. Moore, Editor.—No news in 11 months.

SIMPSON COUNTY

Drs. A. E. Kennedy and F. L. Walker attended the most recent meeting of the Central Medical Society in Jackson. They report a very beneficial program.

We have had an epidemic of measles in the county. It seems that only a few who had not had it have escaped. It almost caused the closing of some of our schools. But all of them carried on the worst seems to be over.

I am glad to say that our Maternity Center was not just an idle rumor. The hospital has been taking care of the maximum number of OBS cases from the first day. I think this is a very helpful project and should be in every county of the state where there is a hospital.

Friday, March 31, nearly all doctors were called to attend storm victims. The storm came through our county probably with less damage done than in some other places, but not without frightening the people who were in the cyclone of December, 1931. I was called to a rural school where lightning had struck a stove, slightly injuring three persons. In order to get to the building I had to wade in water three feet deep. Damage done to bridges over the county from the downpour of rain has interfered very much with traffic.

E. L. Walker,
County Editor.

Magee,
April 4, 1933.

SMITH COUNTY, R. B. Boykin, Editor.—No news in two years.

STONE COUNTY, S. E. Dunlap, Editor.—No news in two years.

SUNFLOWER COUNTY, G. J. Mancill (appointed in April).—No news in two years.

TALLAHATCHIE COUNTY, T. F. Clay, Editor.—No news in two months.

TALLAHATCHIE COUNTY, J. E. Powell, Editor.—No news in five months.

TATE COUNTY

Just to save the face of the Tate County Medical Society, I am sending something, as our county man seems to forget it, regardless of the fact that I try to keep behind him. It is true that we have so little to report, not having a hospital, and society meetings just now and then.

But might get up a little just to have Tate on the map. **You know** we have the best county in the state anyway.

But if you can read this report you will be even better than I think for it was written on a **depression** typewriter, that has long since seen its best days.

I have tried for 24 years as secretary to have a 100 per cent membership in the county and Dr. Dye can tell you how well I have succeeded. But am falling short this year.

I hope that we can begin to meet regularly at an early date, and have meetings that are really worth reporting.

Our officers for the year are same as last year: Dr. M. M. Powel, Coldwater, president; Dr. L. L. Welborn, Looxahoma, vice-president; myself, secretary and treasurer; Dr. H. L. Murphey, Arkabutla, delegate. I believe I have sent this list to you before is why I did not put it on report. But if failed and you think best, you can add it to the statement for Tate to help us get more news for the county. Thanks for your constantly calling my attention to this matter as we want to be at least remembered among the counties of the state. What I said in beginning of my **news** was not intended as a dig at you but on other hand, really to say that you are the only man working to get Mississippi news.

Inasmuch as our county editor for the New Orleans Medical and Surgical Journal seems to be asleep, and sends very few reports to the Journal, I, as secretary of the county society, and health officer for some 21 years report a little as per your request of our very efficient editor, Dr. Leon S. Lippincott. I want to say one thing for him. He is the most persistent editor I ever knew. You, or someone else, must tell him something or he will devil your soul. He just has to have Mississippi News. GOD bless him.

Now he says send greetings to our president and president-elect. They are both too well known to need any greetings or introduction. They are both wide awake citizens and physicians, have a hearty hand shake for everyone they meet, and with the reins of the medical association in their hands, there is nothing we can look to but better times and better membership. May they realize a real 100 per cent membership. And I promise that so far as Tate County is concerned, another year we will be 100 per cent.

Right now out of ten active physicians of the

county we have nine members of Tate County Medical Society. There are two that are too old to practice, or they say they are too old, but really just in the prime of life, for they are better prepared for the battle against disease than we who may be younger.

The Tate County Medical Society meets every first Wednesday night. However, we have not been meeting regularly for sometime. We hope to begin again at once. We always get lots of good out of our meetings even if only a few are present. Every member has something that will help the other members.

The mother of Dr. J. Sidney Eason of Coldwater and Dr. W. H. Eason of Tupelo died on March 10. She was well known by most all the people of the county and by all the physicians.

The mother of Dr. H. L. Murphey of Arkabutla suffered a stroke of apoplexy some days ago but we are happy to state that she is better now and hope will soon be well again and enjoying her usual health.

There have been several people in the county bitten by rabid dogs during the past month, but all are taking treatment and doing fine, so hope there will be no further trouble; also several cases of diphtheria, but all exposed have been vaccinated, and the disease will soon be checked. There have been over 1100 vaccinated against diphtheria during the past year in this county and we have only a part time health office; nearly 2000 against typhoid, and something over 1500 against small-pox.

If there is anyone to blame for this scattering report just blame Dr. Leon S. Lippincott and not Yours Truly.

J. Sidney Eason,
Secretary.

Coldwater,
April 6, 1933.

TIPPDAH COUNTY

Our doctors who attended the meeting of the North Mississippi Medical Society at New Albany were much entertained and benefitted in hearing a lecture illustrated by slides given by Dr. Motley of Memphis on the heart.

All Tippah doctors not members were urged to attend this meeting and several were present.

Dr. H. P. Clemmner and wife have been visiting here for several days to the pleasure of their friends and families. He is in a veterans' hospital in South Carolina.

Dr. A. V. Murry, interne at General Hospital, Shreveport and Miss Perry, dietician there, spent the week-end in Ripley with friends and relatives.

All Tippah friends of Dr. A. Hudson, New Albany, are grateful in knowing he is considered well enough to be at work again.

The state medical meeting will soon be held and it is to be hoped it will be a full one, honoring those who give their best efforts and time to make it successful and at the same time get much benefit in exchange of experience and observation.

Tippah county is to have benefit of a survey for intestinal parasites in school children and it is to be hoped parents and officials will co-operate as in previous times we have shown a heavy infection in parts of the county.

C. M. Murry,
County Editor.

Ripley,
April 10, 1933.

TISHOMINGO COUNTY

We are so far away from the rest of you we fear you will forget us if we don't come across with a few items once in a great while. So we thought we would try to get into the **convention number** with our first items.

We have ten active physicians and surgeons in this county. Four of them attended the Thirteen Counties Medical meeting at Macon on the 21st ult., and were well paid for our trip although it was a long one.

All honors to our retiring president, Dr. J. M. Acker and hearty greetings to our president-elect, Dr. J. W. D. Dicks, of the State Medical Association. Organized medicine will always be safe in the hands of men like these.

We congratulate ourselves that we have in Tishomingo county the champion obstetrician of Mississippi when it comes to number of cases reported in 1931-32. It's the jolly, wholesoul, everybody's friend, Dr. A. F. Whitehurst, having reported 181 in 1931 and 180 in 1932.

T. P. Haney, Sr.,
County Editor.

Iuka,
April 10, 1933.

TUNICA COUNTY, M. B. Jernberg, Editor.—No news in two years.

UNION COUNTY, H. P. Boswell, Editor.—No news in five months.

WALTHALL COUNTY, B. L. Crawford, Editor.—No news in two years.

MONROE COUNTY

It appears that "gentle spring" has come at last. The day is "beautifully clear and clearly beautiful" while the birds sing sweetly and all nature smiles. If we might only forget the harrowing experiences (financial experiences) of the recent past, all would be well. Let us strain the ear of listening hope for a note of cheer. Perhaps the man, Roosevelt, may pilot us out of the slough of despondency that has well nigh wrecked all hope of better times.

What a pity it is that you all did not go to Macon on the third Tuesday in March. The day was wonderful and the roads were fine. Our society has never met so far south before, but a real nice attendance materialized. Members from every county in the district were there and visitors from the outside were there, too. Dr. E. Laurence Scott of Birmingham, was our honor essayist and his lecture was a real treat. He took for his subject so-called "Infantile Paralysis," and to say he covered the subject well does not convey any idea as to the value of the discussion. That one lecture would have repaid any doctor from any part of the state for his time and trouble. Again, I say "what a pity you were not all there." We always have something good "on tap", at these quarterly meetings. Why miss any of them?

In my last communication, I told you of the serious sickness in Dr. I. P. Burdine's family. I am glad to report that both his daughter and his wife have recovered their health. But I am sorry to have to state that he, himself, is quite ill and has been for several weeks. After spending about two weeks in our local hospital, he went to Memphis and is now in the Baptist Hospital in that city. He is undergoing treatment for a prostate involvement. I am much pleased to be able to say that late reports indicate improvement in his condition.

Dr. C. E. Boyd's father-in-law died one day last week. He was a life-long resident of the community in which he lived and was a most highly respected and honorable citizen. He will be greatly missed by a host of neighbors and friends. I extend my sincere sympathy to his family—especially to Dr. Boyd's good wife. I have no better friend than she, and no doctor has truer helpmate than she is to her husband, Dr. C. E. Boyd.

About two weeks ago one of our town's most beautiful and accomplished young women, who for some two years or more has taught in the city schools at Wiggins, came into my office and with her came a young M. D. I had never met this young doctor before, but I liked him very much. He is good looking, bright and affable, and he is a nephew of a friend of many years' standing—Dr. Joe Green of Laurel.

Of course, we all think of him as "Dr. Green from Green." I hope that the younger Dr. Green will be my friend for many years to come. I told the young lady who introduced him to me, that there was room just now for a bright young doctor in Amory—but that we had not a single girl to spare.

In about a month from now, I hope to wend my way towards Jackson. I want all my friends to meet me there. Last spring I had to forego the pleasure of going to our annual meet—the second time in thirty years that I have missed. These meetings have been my greatest inspiration and

the friends I have made and come to love, have been been my greatest joy. Until then, "so long."

G. S. Bryan,
County Editor.

Amory,
April 4, 1933.

MONTGOMERY COUNTY

We have very little to report. The doctors all seem to be fairly busy. Since our last report we have had only one new doctor added to our county, Dr. Oliver, of Duck Hill. We wish him success in his new field of practice.

Dr. and Mrs. James P. Ward are visiting in Winona.

Mrs. Oscar Ringold of Dallas, Texas, is visiting in the home of her father and mother, Dr. and Mrs. J. O. Ringold. She will be here until Dr. Oscar Ringold returns in June.

The doctors' collections seem to be a little short, but I guess things will soon be better.

J. O. Ringold,
County Editor.

Winona,
April 5, 1933.

NESHOBA COUNTY, W. R. Hand, Editor—No news in seven months.

NEWTON COUNTY, S. A. Majure, Editor—No news in 23 months.

NOXUBEE COUNTY

The Northeast Mississippi Thirteen Counties Medical Society met in Macon on March 21. A very good number of the members were present considering that Noxubee County is the southernmost county in the society, and the members from the northern portion of the society had so far to come. Dr. E. Laurence Scott of Birmingham, Ala., was the principal essayist and gave a very interesting and instructive talk on infantile paralysis, illustrated by lantern slides.

Dr. Bradford, a prominent orthodontist of Birmingham, was also a visitor at the meeting.

Drs. Underwood and Ricks of the state health department attended the meeting, and took part in the various discussions.

Dr. Richardson of Louisville, was a visitor at this meeting.

Dr. S. F. Hill made business trips to Jackson and Birmingham during the month.

Dr. C. W. Salter visited his mother in Hazlehurst recently.

Dr. C. G. Wright of Brooksville, is still in a hospital in Chicago, his condition being reported as serious, and his office is closed indefinitely.

Drs. Riley and Flynt of Meridian, were called to Macon recently on professional business.

Dr. Eugene Johnson and Dr. Taylor of Memphis, Tenn., were called to Macon two weeks ago to

operate on the little son of Mr. and Mrs. Harold Shannon, who has been seriously ill for several weeks.

There was an outbreak of mild small pox in the northeastern part of the county several weeks ago, but after about 1500 vaccinations had been given by the county health officer and those assisting him, the disease has been checked.

Dr. E. M. Murphey was in New Orleans on professional business.

E. M. Murphey,
County Editor.

Macon,
April 9, 1933.

OKTIBBEHA COUNTY, J. F. Eckford, Editor—No news in seven months.

PINOLA COUNTY, G. H. Wood, Editor—No news in four months.

PEARL RIVER COUNTY

Well, we have some of the good and some of the bad. One of our banks, the Bank of Picayune, opened for general banking business. The other, the Bank of Commerce, Poplarville, due to the fact that its correspondent bank in New Orleans is only open under restrictions, has been forced to operate under restrictions, causing a great deal of inconvenience to the people generally. But we are expecting it to open within a few days for general business and then we will all be sitting pretty again. Guess we are fortunate to have one bank within the county able to function normally.

Strawberries are now being shipped from Picayune in carload lots. This is giving employment to many people and bringing money into the county. Much interest is shown in the dairy business and as pastures get better there will be a more abundant supply of milk and more money to the dairymen and to the county. We have a good market in New Orleans for all the graded milk that we can send there. The lumber business is somewhat better and the price of lumber is advancing.

There seems to be comparatively little sickness in the county other than appendicitis and other such surgical conditions. And lest we forget, the birth rate in this county has not decreased at all since so many people have become indigent, banks have closed and physicians can not collect their fees. A rather large number of acute surgical cases have developed since the banks have been closed. The incidence of acute communicable diseases is very low, however, much to the gratification of all concerned. And the county health department is making every effort to see that this shall obtain at all times.

The hospitals of the county are having their troubles just as do individuals. They are still

operating but under many handicaps. That goes, however, for all such institutions I judge.

We are looking forward to the meeting of the State Medical Association. We send greetings to our president and president-elect. We extend to our president congratulations for what he has been able to do during this most unusual year, and we are hoping that conditions will be more favorable for our president-elect. We believe that we can see Miss Prosperity shyly peeping through a bouquet of roses at us. Let us all gather new courage and new life for a more favorable year.

G. E. Godman,
County Editor.

Poplarville,
April 8, 1933.

PERRY COUNTY, B. T. Robinson, Editor—No news in two years.

PIKE COUNTY, T. P. Haney, Jr., Editor—No news in two months.

PONTOTOC COUNTY

We are glad to welcome Dr. C. W. Patterson to our county. Dr. Patterson moved to Houlka, R. 3, from Reid.

Dr. J. A. Donaldson of Okolona, died at his home one day last week.

Very little sickness in the county now. Usually see three or four out-of-town doctors in town every day. Some of them have begun to get fishing in their bones. Quite a number report that they expect to attend the meeting of the State Medical Association in Jackson, next month. We hope to have a good crowd from Pontotoc county.

Dr. J. M. Hood of Houlka, was a visitor in town one day last week.

We have had a few rabid dogs in the county in the past two weeks, but fortunately have not had any one bitten so far.

Will ring off for this time.

R. P. Donaldson,
County Editor.

Pontotoc,
April 8, 1933.

PRENTISS COUNTY

Dr. Bernard Patrick, who has recently received his M. D. degree from the University of Tennessee, and who has been doing special work in pathology for the past two years is now associated with the Sutherland Clinic.

Drs. R. B. Caldwell J. L. Kellum, N. C. Waldrop and E. J. Green, were professional visitors to Booneville during the past month.

Dr. W. H. Sutherland attended the last staff meeting of the Tupelo Hospital, and gave a paper on "Blood Dyscrasias With Particular Reference to the Leukemias."

The Northeast Mississippi Hospital staff meeting was held March 20. There was a good attendance. Dr. H. B. Sutherland presented a paper on "Lobar Pneumonia." Dr. W. H. Sutherland presented a series of cases of chronic myelogenous leukemia and one of Banti's disease. These papers were liberally discussed.

R. B. Cunningham,
County Editor.

Booneville,
April 8, 1933.

QUITMAN COUNTY

Those attending the medical association in Clarksdale from Quitman county were: Drs. A. C. Covington, E. C. Gillespie and E. A. McVey. We had an interesting program and, as usual, an excellent menu.

E. A. McVey,
County Editor.

Lambert,
April 10, 1933.

RANKIN COUNTY, W. H. Watson, Editor—No news in two years.

SCOTT COUNTY, W. C. Anderson, Editor—No news in two years.

SHARKEY COUNTY, W. C. Pool, Editor—Missing.

SIMPSON COUNTY—SANATORIUM, S. F. Strain, Editor—No news in nine months.

WARREN COUNTY

Warren County as it has always done in the past pledges support to Dr. Dicks, who, like all presidents of this day, has quite a job to tackle. We feel that Dr. Acker has notably carried on his good work during this dreary year, and so it is, as Acker in the past, Dicks in the future, and Warren county will always "Carry On."

Dr. W. Pierre Robert of Birmingham, Alabama, has been welcomed to Vicksburg. Dr. Pierre will be in charge of the Department of Pediatrics at the Vicksburg Hospital, in Vicksburg.

Dr. Augustus Street and Dr. Tom Sparks were guests at the Central Medical Society this month. Dr. Sparks presented a paper at that meeting.

Dr. Preston Herring, president of the I. S. W. Counties Medical Society, motored over to Lake Bruin last Sunday. It was stated that he had a nice catch.

Dr. W. D. Anderson will fill the place of Dr. Weston who left Vicksburg this month. Dr. Anderson will be in charge of internal medicine at the Vicksburg Hospital.

Dr. I. C. Knox motored to Pontotoc this month. It was stated that the trip was for pleasure.

Dr. Hugh Johnston is in town and is to open an office soon, his practice to be limited to eye,

ear, nose and throat. Dr. Johnston has just returned from a three-year stay at the Mayo Clinic.

Nathan B. Lewis,
County Editor.

Vicksburg,
April 10, 1933.

WASHINGTON COUNTY

The April, 1932, meeting of the Delta Medical Society was not held on account of the overflow of several of the counties. The meeting was to have been held in Greenwood, but due to the fact that Greenwood was partly inundated, the president, Dr. George Baskervill, requested that the meeting be postponed until October. The Greenville doctors extended an invitation to the society to hold the meeting in Greenville. After consideration it was thought best by the officers of the Society not to accept this invitation.

On October 12, 1932, the regular fall meeting was held in Greenwood with Dr. George Baskervill presiding. This meeting was honored by the presence of Mrs. W. C. Pool, Cary, president of the Womens' Auxiliary to the Mississippi State Medical Association, and Mrs. W. R. Brooksher, Fort Smith, Ark., vice-president of the Women's Auxiliary to the American Medical Association. These ladies made short talks discussing the organization of an auxiliary to the Delta Medical Society. The society being unanimously in favor, the ladies immediately went into session and formed this organization which has been so needed an asset. The following officers were elected: Mrs. J. A. Beals, Greenville, president; Mrs. J. C. Adams, Greenwood, first vice-president; Mrs. T. E. Holloman, Itta-Bena, parliamentarian, and Mrs. J. C. Pegues, Greenville, secretary. Under the able leadership of Mrs. J. A. Beals the organization has been a most active one.

A motion was introduced by Dr. L. B. Otken of Greenwood, that the following resolutions be discussed and passed by the society. After considerable discussion all four resolutions were passed.

"We the members of the Delta Medical Society, desire to go on record as favoring the following:

1. Passage of the basic science law.
2. The curtailment of the activities of the State Board of Health, so far as the giving of serums, toxins, etc., is concerned, except to absolute indigent cases. Specifying that tenants on farms and plantations shall not be so classed.
3. The abolition of the privilege tax on physicians including sales income tax, also taxes on their working equipment. We feel that these taxes are unjust in view of the amount of charity work that we are called upon for, and that we gladly do.
4. A full and complete discussion of this matter before the House of Delegates at the next meeting of the Mississippi State Medical Association.

The Mississippi State Medical Association has

been most fortunate in having Dr. James M. Acker, Jr., of Aberdeen, as president of the association for the past year. He has done a great deal for the betterment of the association. His efforts have been untiring, he has been progressive in his program, and his work will always stand out as a stimulus to those who may follow him. The association as a whole appreciates more than words can express, Dr. James M. Acker, Jr.

Our new president, Dr. J. W. D. Dicks, is thoroughly capable of carrying on the hard task that will be placed in his hands. Each and every member of the Association as a whole is ready to support him whole-heartedly and it is predicted for him a most successful year.

All doctors of Washington County are urged to attend the annual meeting of the Mississippi State Medical Association in Jackson, May 9-10-11. This is not only a most instructive meeting, but a great opportunity for us to become better acquainted with the Mississippi doctors.

Dr. A. J. Ware, who was confined to his bed for about a week on account of an attack of influenza, is able to be out again.

Dr. R. N. Crockett of Winterville, was sick a few days with influenza, but is able to be on the job again to the delight of his patients and his many friends.

Dr. H. R. Miller, who has been in ill health for the past year, was out for a few days, but unfortunately was unable to remain up. He is somewhat improved and it is hoped by all that he will make a complete recovery soon.

Ferris Oliver of Leland, son of Dr. T. C. Oliver, was brought home from school several days ago on account of a recent illness. It is sincerely hoped that young Oliver will soon be able to resume his studies.

John G. Archer,
County Editor.

Greenville,
April 9, 1933

WAYNE COUNTY, W. P. Gray, Editor—No news in two years.

WEBSTER COUNTY

The doctors are not very busy in this section at present.

Dr. and Mrs. W. A. Berryhill of Europa, are visiting their son, Ira West, in the Rio Grande Valley.

Hugh K. Curry, son of the writer, who is a junior at the University of Tennessee medical school, spent last week-end at home.

We are having a pre-school clinic April 12, at Mathiston, sponsored by the Y. W. C. A. of Bannatt Academy. The physicians and dentists of the surrounding towns have kindly consented to assist in giving the children between the ages of six months

and six years, a general physical examination and, at the same time, administer toxoid free. We held a clinic along the same line last year with very gratifying results.

W. H. Curry,
County Editor.

Eupora,
April 6, 1933.

WILKINSON COUNTY, S. E. Field, Editor—No news in two months.

WINSTON COUNTY

Dr. W. B. Watkins of Noxapater, visited his brother at Collierville recently.

Dr. R. Donald of Meridian Charity Hospital visited our city last week.

Dr. E. L. Richardson reports a very successful fishing trip this week, having caught 38 bream.

Dr. W. W. Parks and his good lady, Mrs. Parks, spent some time visiting their son and daughter, Mr. and Mrs. S. Owens of New Albany, last week.

We should pause to express our very high appreciation of the beautiful spring weather we are having.

The writer spent the 6th inst. in Aberdeen, attending court.

We are looking forward with some interest to the next meeting of the East Mississippi Medical Society now soon.

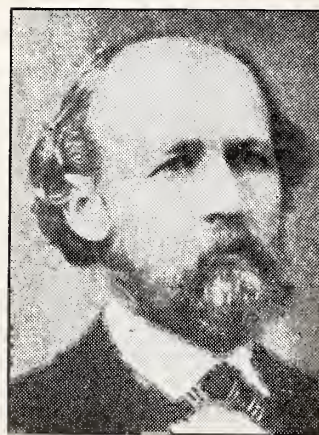
M. L. Montgomery,
County Editor.

Louisville,
April 8, 1933.

YALOBUSHA COUNTY, G. A. Brown, Editor—No news in five months.

YAZOO COUNTY, C. M. Coker, Editor—No news in six months.

LEST WE FORGET THEIR GOOD WORKS



E. T. HENRY, M. D., Vicksburg
President, Mississippi State Medical Association,
1869-70.

Dr. Edmund Taylor Henry, son of Patrick Henry and Elizabeth Duke Taylor, was born on his father's plantation near Clarksville, Tenn., August 24, 1827 and died at Marietta, Ga., April 9, 1881.

Dr. Henry received his early education at Montrose Academy and Centenary College and, being always of a studious nature, took up the study of medicine as an accomplishment, graduating at Louisville, Ky. At the outbreak of the war he entered the Confederate Army as a surgeon and at the end of this service, finding his property gone, moved to Vicksburg and began the practice of medicine in which he was very successful, being especially noted as an obstetrician. He passed through three yellow fever epidemics, having the disease himself in 1867 and again in 1878, and after the second attack his heart was so impaired that he was never well again.

Dr. Henry was married to Louise Clarke Forbes and had six children, Edmund Taylor, Louise, Elizabeth Taylor, Patrick, Marion and Gertrude. He was a broad-minded Christian, a member of the Episcopal Church and one of the first vestrymen of Trinity Church, Vicksburg. Of tall, commanding stature, with the manners of a Chesterfield, he was notable in any assembly and his quick and bright repartee and fund of anecdotes made him a genial companion. He was an ardent Mason, having taken the 32nd degree, and held some of the highest honors in his body.

Mrs. H. M. Marshall.

NOTE—If anyone knows of any additions or correction that should be made to the above sketch, please communicate with Dr. E. F. Howard, Historian, Vicksburg.

NEWTON INFIRMARY

Misses Ruby Sullivan and Virginia Day, who will graduate from our school of nursing May 5, went to Jackson and took the examination before the State Board of Examiners for Nurses.

Miss Bernice Horne, who finished her training here Jan. 15 of this year and who is now working in the Medical and Surgical Clinic in Meridian, also took the examination.

We will hold a graduating exercise for these three young ladies and Miss Doris Hays, who will finish her training in September, in the Methodist Church here, May 5 Rev. Wayne Allison will deliver the address.

Our training school is affiliated with the Matty Hersee Hospital in Meridian.

Mrs. S. Kemp, Secretary.

Newton,
April 5, 1933.

COUNTY EDITOR APPOINTMENTS

NORTHEAST MISSISSIPPI THIRTEEN COUNTIES MEDICAL SOCIETY—Dr. F. L. McGahey, President:

For Chickasaw County—Dr. W. C. Walker, Houlka.

DELTA MEDICAL SOCIETY—Dr. J. C. Higdon, President:

For Bolivar County—Dr. C. W. Patterson, Rosedale (reappointed).

For Humphreys County—Dr. G. M. Barnes, Belzoni (reappointed).

For Leflore County—Dr. W. B. Dickins, Greenwood (reappointed).

For Sunflower County—Dr. G. J. Mancill, Indianola.

For Washington County—Dr. J. G. Archer, Greenville.

WOMAN'S AUXILIARY TO THE

MISSISSIPPI STATE MEDICAL ASSOCIATION

President—Mrs. W. C. Pool, Cary.

President-Elect—Mrs. F. L. Van Alstine, Jackson.

State Convention—Jackson, May 9, 10, 11, 1933.

Chairman Press and Publicity, Mrs. Leon S. Lippincott, Vicksburg.

NATIONAL CONVENTION NEWS

Mrs. James F. Percy, National President, of Los Angeles, Cal., in her April News letter says: "Since it is generally conceded that we are at the beginning of a New Era, let us contribute in this, its first year, by our presence and our keen interest in bringing from our own store of experience that which will be of help, value and inspiration to others, and in return, have the joy of knowing that we have added immeasurably by our encouragement, support and our assistance to the supreme satisfaction which the resulting success will bring to those who have prepared this feast of reason and flow of soul for us, to say nothing of what our eyes will see, our ears hear and our memories carry away with us."

"Great team work is being established between Wisconsin and Illinois developing the Convention for Milwaukee and Fair exhibit at Chicago."

"The committee on Exhibits, Mrs. H. R. Miner, Chairman, promises not only to have a real rivalry in her department at Milwaukee, but hopes that much may be taken to the "Century of Progress Fair" at Chicago where thru the efforts of the Woman's Auxiliary, the President of the Chicago Medical Society and Dr. Wm. A. Pusey, a gift of space 10x10 feet, which would bring a rental price in four figures, has been most generously arranged as a gift by Dr. E. J. Carey of Milwaukee, who is

in charge of the Hall of Science where this space is. Here will be an information bureau for the wives of visiting physicians, with local members as attendants."

For Auxiliary women and all other wives of physicians, here is the Preliminary Program of the Convention itself, Milwaukee, June 12-16, 1933.

WOMAN'S AUXILIARY
TO THE

Eleventh Annual Meeting
AMERICAN MEDICAL ASSOCIATION
Milwaukee, June 12-16, 1933

HEADQUARTERS: Hotel Pfister, Milwaukee, Wis.

MONDAY, JUNE 12, 1933

12:30 P. M. Luncheon at College Woman's Club in Honor of Past Presidents, followed by National Board Meeting and visit to American Medical Association Exhibits at Auditorium.

Tickets \$1.00

7:00 P. M. Dinner for National Board, Delegates, and wives of Officers and Delegates of the American Medical Association at Woman's Club of Wisconsin.

Musical Program furnished by Artist Members of Auxiliary to Medical Society of Milwaukee County.

Tickets \$1.25

TUESDAY, JUNE 13, 1933

9:00 A. M. General Meeting.....Roof Room,
Hotel Pfister, Mrs. James Percy, Presiding
12:30 P. M. Luncheon and Bridge at Wisconsin Club.

Tickets \$1.25

2:00 P. M. * Attractions available for those not wishing to play Bridge are Layton Art Gallery, Milwaukee Art Institute, Milwaukee Museum, Curative Work Shop and Vocational School, or

* Bus Trip to County Institutions, Milwaukee Children's Hospital Convalescent Home, and Washington Park Zoo.

8:00 P. M. General Meeting of American Medical Association.

10:00 P. M. Informal Dance at Wisconsin Club Courtesy of State Medical Society of Wisconsin. Hostesses: Woman's Auxiliary to the State Medical Society of Wisconsin.

WEDNESDAY, JUNE 14, 1933

9:00 A. M. General Meeting.....Roof Room,
Hotel Pfister, Mrs. James Percy, Presiding.
12:30 P. M. Auxiliary Luncheon.....Fern Room,
Hotel Pfister.

Guests and Speakers from the American Medical Association.

Musical Program.

Tickets \$1.00

4:00 P. M. * Teas in Private Residences.

8:30 P. M. Light Opera.

Tickets \$1.00

THURSDAY, JUNE 15, 1933

9:00 A. M. General Meeting.....Roof Room,
Hotel Pfister, Mrs. James Blake, Presiding

12:30 P. M. Buffet Luncheon.....Chrystal Room,
Hotel Pfister.

Tickets 75c

—or—

12:00 Noon. Trip to Oconomowoc Lake district.
Luncheon 12:30 P. M., Carnation Milk Plant
Plant, Oconomowoc, Wisconsin, Transportation
and Luncheon Courtesy of Carnation Milk Co.
2:00 P. M. * Sight seeing Tour of Milwaukee.

6:30 P. M. "Bring You Husband" dinner.....Fern
Room, Hotel Pfister.

International-House-Cabaret

Tickets \$1.50

9:00 P. M. Presidents Reception and Ball.....
Schroeder Hotel.

Hosts: The Americal Medical Association.

FRIDAY, June 16, 1933

10:00 A. M. Golf Tournament

All trips start from Hotel Pfister.

* Bus transportation to be paid by individuals.

Mrs. Rock Sleyster, General Chairman

Mrs. William Liefert, Chairman Hotel

Committee,

4103 North Murry Avenue, Milwaukee, Wis.

Look up the April issue of the American Medical Association Bulletin and read the delightful and convincing letter from Mrs. A. Haines Lippincott concerning Auxiliary Public Relations Opportunities and Duties.

SIMPSON COUNTY UNIT
Of The

Central Medical Society

Dear Mrs. Lippincott,

I am enclosing a little item of news. The Simpson County Unit to the Central Medical Auxilliary was organized at Sanatorium, March 18, 1933, with a membership of eight, with the following officers:

President, Mrs. E. L. Walker, Magee.

Vice-President, Mrs. C. E. Walker, Sanatorium,

Secretary-Treasurer, Mrs. E. D. Kemp, Sanatorium.

We expect a much larger membership as soon as we complete our organization. The delegate to the State Convention is Mrs. Henry Boswell, Sanatorium; Alternate, Mrs. S. L. Knight, Mendenhall.

Sincerely Yours,

Iola S. Boswell.

Sanatorium,
March 23, 1933.

WOMAN'S AUXILIARY TO THE TRI-COUNTY MEDICAL SOCIETY

The Tri-County Auxiliary has been quite active since the visit of our enthusiastic and efficient state president last November. Due greatly to Mrs. Pool's encouragement, we have held regular meetings, the last one being an enjoyable joint meeting with the Tri-County Medical Association at Copiah-Lincoln Junior College.

The special work undertaken by our auxiliary is the aiding of the Brookhaven King's Daughters' Hospital in every way. Recently we helped to fill one of their needs by giving them some new dishes. Another organization very dear to our hearts, the Preventorium, was remembered by us a few weeks ago with a box of sweets. A new work which we are now planning, is the making of layettes for needy cases.

Officers for this year are: President, Mrs. F. E. Collins, Vice-President, Mrs. W. R. May, Secretary, Mrs. J. R. Markette, Courtesy Chairman, Mrs. H. R. Fairfax.

Mrs. H. R. Fairfax.

Brookhaven,
April 1, 1933.

WOMAN'S AUXILIARY TO THE HARRISON-STONE-HANCOCK COUNTIES MEDICAL SOCIETY

On March 16, the Auxiliary sponsored a china shower for the King's Daughters' Hospital at Gulfport, with the doctors' wives serving as hostesses in cooperation with the superintendant of nurses and other members of the staff of the hospital.

The public was invited to bring donations of china to the hospital between 3 and 5 o'clock in the afternoon, and were greeted by the president, Mrs. George Melvin, and several other members of the Auxiliary. After placing the donations on tables arranged in the lobby, the visitors were served tea at a beautifully decorated table placed in the reception room. More than 500 pieces of china and glassware were the result of this happy occasion, for which the hospital management was most appreciative, as owing to present conditions a replacement was impossible.

The local Auxiliary has centered its activities on hospital work this year and feel very proud of the things accomplished.

Dr and Mrs. Dan J. Williams were privileged to attend the meeting of the Pan-American Medical Conference at Dallas, Texas, March 20-25. It was indeed a rare opportunity and the enlightening sessions were thoroughly enjoyed by both. The entertainments for the doctors wives were most elaborate and brilliant and done in a way that only

Texas and Dallas do. Dr. J. O. McReynolds, Dallas, was elected President.

Mrs. D. J. Williams.

Gulfport,
April 3, 1933.

WOMAN'S AUXILIARY TO THE ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY

The March meeting of the Auxiliary was unusually interesting. Following the regular custom, the meeting began with a lovely luncheon, at 12 noon, in the Coral Room of the Hotel Vicksburg.

Mrs. George Street was responsible for the attractive decorations. The color scheme carried out the St. Patrick's Day idea. The table was beautiful with a centerpiece of green and white carnations. Each place was marked by little green baskets filled with green and white mints.

At the conclusion of the delicious luncheon, the president, Mrs. Sydney Johnston, turned the program over to the leader, Mrs. George Street, who then graciously introduced the guest speaker, Dr. F. M. Smith, director of the Warren County Health Unit. His talk on "Tuberculosis and the Preventorium" was most instructive and interesting. Mrs. Martelle Minter played beautiful piano numbers.

The members who enjoyed this meeting were: Mrs. Sydney Johnston, Mrs. F. M. Smith, Mrs. H. H. Haralson, Mrs. A. Street, Mrs. Jack Ewing, Mrs. Guy Jarratt, Mrs. Laurence Clark, Mrs. Edley Jones, Mrs. Benson Martin, Mrs. W. C. Pool, Mrs. John Birchett, Miss Zita O'Leary, and Mrs. George Street.

Dr. and Mrs. Edley Jones recently motored to Memphis for a visit of several days.

Mrs. A. Street is being congratulated as the new president of the National Park Golf Club.

Mrs. C. J. Edwards entertained beautifully five tables of bridge players in honor of Miss Marjorie Allen of Port Gibson.

Dr. and Mrs. Hugh Johnston are entertaining Dr. and Mrs. Wilkinson and little daughter, Joann, of Rochester, Minn.

Dr. and Mrs. Weston have gone to make their home in Kansas. Their many friends here regret the decision takes them away from Vicksburg.

Mrs. L. J. Clark.

Vicksburg,
April 3, 1933.

WOMAN'S AUXILIARY TO THE DELTA MEDICAL SOCIETY

The regular semi-annual meeting of the Woman's Auxiliary to the Delta Medical Society was held in Greenville, April 12, in the Methodist Church. The meeting was called to order at 2:30 P. M. by the president, Mrs. J. A. Beals, Greenville, 30 members

being present. Invocation was by Mrs. Hugh Gamble, Greenville; address of welcome by Mrs. S. N. Shankle, Greenville, and the response to the address of welcome was given by Mrs. S. D. Newell, Inverness. Regular business was attended to, followed by the election of vice-presidents to fill vacancies caused by the resignation of those who could not serve this year. The new constitution was also adopted at this time.

The King's Daughters' Hospital was hostess at a tea given for the visiting ladies, and at 7 o'clock, the Washington County Unit entertained 50 ladies at a bridge supper.

All members were disappointed because of the unavoidable absence of their expected guest, the state president, Mrs. W. C. Pool, Cary.

Mrs. J. A. Beals.

Greenville,
April 12, 1933.

WOMAN'S AUXILIARY TO THE CENTRAL MEDICAL SOCIETY

The Woman's Auxiliary to the Central Medical Society held its luncheon meeting Tuesday, April 4, at 12 o'clock in the Trey Tea Shop on Manship Street, Jackson. Mrs. Harvey F. Garrison returned thanks, and Mrs. W. E. Noblin made an interesting talk on "Jane Todd Crawford".

Mrs. F. L. Van Alstine presided over the business session, and heard the report of the nominating committee as follows: President, Mrs. Harvey F. Garrison; Vice-President, Mrs. F. E. Rehfeldt; secretary, Mrs. H. C. Sheffield; treasurer, Mrs. Levi McCarty; historian, Mrs. Noel C. Womack; public relations, Mrs. T. W. Kemmerer; press and publicity chairman, Mrs. B. F. Johnson; public health and preventorium, Mrs. H. R. Shands; Hygeia, Mrs. J. O. Segura; hostess, Mrs. W. G. Dobson.

Members of this congenial group included Mrs. Frank Hagaman, Mrs. Brister Ware, Mrs. H. C. Sheffield, Mrs. D. W. Jones, Mrs. R. R. Walch, Mrs. Buster Brown, Mrs. J. A. Milne, Mrs. A. G. Wilde, Mrs. F. L. Van Alstine, Mrs. Felix J. Underwood, Mrs. T. A. Wilson, Mrs. W. E. Noblin, Mrs. W. G. Gill, Mrs. A. L. Monroe, Mrs. J. S. Hickman, Mrs. R. R. Halfacre, Mrs. Harvey F. Garrison, Mrs. B. F. Jonson, Mrs. J. H. Fox, Mrs. W. S. Sims, Mrs. W. B. Dobson, Mrs. N. R. Currie, Mrs. Carter O'Farrell, Mrs. H. C. Ricks, Mrs. T. W. Kemmerer, Mrs. H. R. Shands.

Dr. and Mrs. B. B. O'Mara, Jackson, are spending

April in Florida, and will visit Orlando, West Palm Beach and Miami, while on this trip.
Jackson,
April 4, 1933.

HONOR ROLL

The following good people contributed to our JOURNAL this month:

COUNTY EDITORS: L. Wallin; James R. Hill; J. James; L. L. Minor; T. J. Brown; W. F. Hand; R. C. Elmore; W. H. Scudder; S. B. McIlwain; A. M. McCarthy; R. B. Caldwell; W. B. Dickins; J. W. Lipscomb; G. S. Bryan; J. O. Ringold; E. M. Murphey; G. E. Godman; R. P. Donaldson; R. B. Cunningham; E. A. McVey; E. L. Walker; C. M. Murry; T. P. Haney, Sr.; N. B. Lewis; J. G. Archer; W. H. Curry; M. L. Montgomery.—27.

COUNTY MEDICAL SOCIETIES.—Central Medical Society, Robin Harris; Claiborne County Medical Society, J. V. May; Clarksdale and Six Counties Medical Society, J. W. Moody and V. B. Harrison; Delta Medical Society, J. W. Lucas; East Mississippi Medical Society, J. S. Hickman, T. L. Bennett; and D. V. Galloway; Harrison-Stone-Hancock Counties Medical Society, E. A. Trudeau; Issaquena-Sharkey-Warren Counties Medical Society, L. S. Lippincott; North Mississippi Medical Society, E. S. Bramlett; Pike County Medical Society, T. P. Haney, Jr.—12.

OFFICERS OF MISSISSIPPI STATE MEDICAL ASSOCIATION.—A. H. Little; J. A. Beals; V. B. Philpot; C. C. Buchanon; H. C. Ricks; T. M. Dye; D. W. Jones; J. M. Acker, Jr.; J. W. D. Dicks; J. S. Hickman; E. F. Howard; J. P. Wall; E. Le Roy Wilkins; J. W. Lucas; L. L. Minor; T. J. Brown; W. H. Watson; H. Lowry Rush; W. H. Frizell; Henry Boswell.—20.

WOMAN'S AUXILIARY.—Mrs. L. S. Lippincott; Mrs. Henry Boswell; Mrs. H. R. Fairfax; Mrs. D. J. Williams; Mrs. L. J. Clark; Mrs. J. A. Beals.—6.

HOSPITALS.—Greenville King's Daughters' Hospital, John A. Beals; Vicksburg Sanatorium, L. S. Lippincott.—2.

OTHERS.—F. J. Underwood; Mrs. S. Kemp; F. M. Acree; F. L. McGahey; A. G. Payne; A. Street; J. A. K. Birchett, Jr.; L. J. Clark; R. A. Street, Jr.—9.

GRAND TOTAL.—SEVENTY-SIX—A RECORD.

YOUR EDITORS SINCERELY THANK YOU!

BOOK REVIEWS

Sex and Internal Secretions: Edited by Edgar Allen. Baltimore, Williams and Wilkins Company. 1932. pp. 951. Price \$10.00.

The name of Edgar Allen attached to any discussion of the sex hormones is in itself sufficient recommendation. This volume, a careful study of sex in its biological sense, is made up of a series of papers on associated topics contributed by twenty-two leading investigators including such names as Doisy, Engle, Gustavson, Hartman, Hisaw, and Smith.

The endocrine products of the female have absorbed the attention of the whole scientific world. At the present time clinicians are using various products widely advertised by pharmaceutical houses, even the good ones, for almost every disorder complained of by the daughters of Eve. Discovery has followed discovery with such rapidity that the clinician is lost who hasn't the time to study, not merely read, the current literature. Several books have appeared since the publication of Frank's review of the Female Sex Hormone, some of them limited to the clinical side of the subject, and others more purely scientific. This work falls in the latter category, as only one of the contributors is a physician. It is probably the most complete discussion of all the phenomena of the sex and associated hormones that has been written. By men of indisputable authority are presented chapters on the male hormone, the ovarian hormone, on the corpus luteum, on the anterior pituitary, and on the relationship of these, concisely and impartially. But their appeal is to the main trained in the laboratory, because not more than a few words are devoted to the human female. The chapter on clinical application is convincingly conservative.

This is at it should be. Our knowledge is still too immature to be applied intelligently in the clinic. All that can be said is that the various products are harmless and may do some good. But light is just beginning to break on the hormone balance in man and the thorough understanding of the reaction in the lower animals with a cautious correlation with clinical knowledge may, in the course of a few years, give us powerful weapons in the treatment of disease. One need look back only on the history of thyroid therapy to appreciate this.

Great praise must be offered for careful weighing of evidence. There is difference of opinion among laboratory workers on such subjects as the actual existence of a prolactin A and B, the identity of prolactin with the tissue of the anterior pituitary, and the importance of species difference in interpretation. These and many similar problems of

the greatest importance are taken up with due consideration to all the arguments.

The value of many pieces of research has been open to grave doubt, and it is gratifying to have each such work criticized and the possible sources of error explained. Each chapter reviews the development of knowledge in the particular field, correlating the evidence and finally summarizing so as to make the data easily available. The bibliography is superlatively good.

If anything can be said of the book to its detriment it is that it is too extensive. The first 240 pages deal more with genetics than endocrinology, although the association of these two branches of science is brought out. On the other hand the 425 or more pages devoted to the ovarian and pituitary hormones may well be used as a standard reference book on the subject and the volume can be recommended to anyone sincerely interested in learning about this new and important phase of biology.

ARTHUR G. KING, M. D.

The Colon, Rectum, and Anus: By Fred W. Rankin, B. A., M. A., M. D., F. A. C. S., J. Arnold Bargen, B. S., M. D., M. S., F. A. C. P. and Louis A. Buie, B. A., M. D., F. A. C. S. Philadelphia. W. B. Saunders, 1932. pp. 846. Illus. pl.

This book published by Rankin, surgeon; Bargen, clinician, and Buie, proctologist, all members of the Staff of the Mayo Clinic, is both medical, and surgical in its scope. In a volume of over eight hundred pages the subject is covered in detail. One is especially impressed with the valuable statistical data. Herein it is possible to find figures on the incidence of occurrence and on the prognosis of various affections of the colon. Many of the statistics are from the records of the Mayo Clinic; others are collected from the literature.

The diagnosis and differentiation of lesions of the large bowel is clearly described. With the use of the protoscope, the retrograde barium enema, and the Fisher method of x-raying the colon, accuracy in diagnosing lesions of the colon has reached a high point of efficiency.

The chapter on chronic ulcerative colitis is of interest. Bargen has isolated a diplococcus from the lesions of chronic ulcerative colitis. Using a vaccine and a specific antibody solution prepared with this organism, he has obtained good results in the treatment of this intractable disease. The regimen which has been successful in his hands is discussed in detail.

The authors think most benign strictures of the rectum are probably gonorrheal in origin. In only 55 of 258 cases at the Mayo Clinic was there evidence of lues and in only 23 of these cases was

lues the only probable etiologic factor. Strictures are more common in the female. This is accounted for by the fact that there is greater anatomic chance that a gonorrheal proctitis will result from a vaginitis in the female than from a urethritis in the male.

The chapters on the neoplasms are excellent. A distinct section is devoted to operative procedures and various techniques are described.

As so many of the affections of the colon are clearly surgical and as colon surgery has advanced rapidly in the past few decades, such a comprehensive, up-to-date, summarizing volume as this is a valuable addition to a surgeon's library. The chapters pertaining to surgery represent the thought and evaluation of the subject by one of the most experienced men of all times in this field.

HOWARD R. MAHORNER, M. D.

Final Report of the Commission on Medical Education. 1932 Office of the Director of Study, New York. pp. 560.

The Committee on Medical Education was organized in 1925 by the Association of American Medical Colleges. The present report is a summation of the innumerable studies that have been made by this commission of eminent teachers, with Willard C. Rappleye acting as Director of Study. There are twelve chapters to the report, with an appendix of 142 pages containing 161 factual tables. The twelve chapters deal with Public Aspects of Medicine, Medical Needs, The Supply and Distribution of Physicians, Postgraduate Medical Education, The Internship, Medical Licensure, The Medical Course, Opinions Regarding the Medical Training, Premedical Education, the Cost of Medical Education, Medical Education in Europe, and a summarizing chapter. At the end of each of these chapters there are conclusions drawn in regard to the subject matter dealt with therein.

A book of this size does not lend itself readily to review. Perhaps the most vivid birdseye abstract may be obtained from the summary. Discussing changes in medical care, it notes that "specialization and fragmentation of medical practice have created many services which are not well adjusted to the requirements of individuals and the community, particularly in the larger cities." There are innumerable workers in the profession and these should be under the supervision of trained physicians who are familiar with the problems involved and the objectives to be sought. Medical economics are discussed under the problems of medical care. It has been urged that medical service should be opened to the public on a mass production basis. "The unit of practice, however, whatever the type or degree of organization, is the individual patient. It is a fundamental fallacy to base any program upon an assumption

that the human being can be, or is likely in the future to be, a uniform, standardized organism." The uneven burden of illness is stressed and attention is called to the unfair distribution of the cost of sickness, born as it is by a small portion of the people. Some plan must be evolved for distributing this cost, but it is hoped that the economic and social mistakes made in other countries will not be made in this country if social legislation leading to national sickness insurance should have to be developed.

There is an over-supply of physicians not only because a large number of students are being turned out in this country, but also because innumerable American students are now studying abroad. Modern facilities have enhanced considerably the ability of the physician to take care of more people than in the past. Consequently a high ratio of physicians to population need no longer exist. Unfortunately, doctors are distributed inequitably, with the greatest concentration in the large cities. Specialism has extended beyond all bounds of common sense. A register of specialists should be created in each state with the provision that only real experts should be on this list.

The internship is considered in most instances to be faulty, chiefly because of failure of the recent medical graduate and the chief of service to look upon the internship as being part of the basic medical training. In regard to medical licensure, it is pointed out that responsibility for training physicians should be left to the universities without interference from state boards. Medical education itself is dealt with extensively. It is stressed that it is impossible to present an entire subject, an unnecessary and futile endeavor, as any one person cannot be expected to master all phases of medicine. Greater responsibility should be placed on the student for his own training, emphasizing learning in contrast to teaching. Patients should be studied as a whole and factors such as emotional tone, conditions of employment, habits of living and other daily features of life should be considered in making a diagnosis and completing treatment. Insufficient attention is devoted to the prevention of disease in most medical curricula.

In the selection of the student more attention, it is held, should be paid to evidence of achievement and promise rather than to credits for admission to medical school. After admission to the school, there should be presented to the young student, probably in schematic form, the efforts being made to adjust practice to the new conditions that now exist within the profession and within society. Knowledge of the chemical, physical, etiologic and pathologic phenomena of disease do not necessarily produce a real physician. He must learn to assemble and evaluate bits of evidence, to discrimi-

nate between the essential and the true and the unimportant and the untrue; to synthesize clinical entities often much confused, and to consider the human and emotional problems of sickness.

There are innumerable problems in medical education. They can be solved soundly only by the co-operation of the medical profession, hospitals, public health departments, medical schools, social agencies and licensing boards. Only then will there be a sufficient number of properly trained physicians who the community can expect to meet the responsibility of the care and prevention of illness and the protection of health.

J. H. MUSSEY

Technique of Contraception: By Eric M. Matsner. Amer. Birth Control League, 1933. pp. 38. Price, 50 cents.

A terse, authoritative and excellent contribution to an important subject. The indications for contraception are briefly alluded to, and the contraceptives with their indications, contraindications reliability and technique are most satisfactorily and briefly presented.

I. L. ROBBINS, M. D.

Calcium Metabolism and Calcium Therapy: By Abraham Cantarow, M. D., with a foreword by Hobart Amory Hare, B.Sc., M. D., LL.D. 2d ed., thoroughly rev. Philadelphia, Lea & Febiger, 1933. pp. 252. Price, \$2.50.

This is the second edition of a most excellent and exhaustive treatise on a subject that is most important to the Physician. The great importance of calcium makes it imperative that one should have a thorough knowledge of it. This, the monograph most successfully presents. A splendid bibliography and index are notable parts of a well-written, hand-sized, well-bound book.

I. L. ROBBINS, M. D.

Procedures in Tuberculosis Control for the Dispensary, Home and Sanatorium: By Benjamin Goldberg, M. D., F.A.C.P., F.A.P.H.A. Philadelphia, F. A. Davis Co., 1933. pp. 373. Illus.

This book is of much interest to the practicing physician, but even more to the public health service worker. It presents the problems of tuberculosis as they pertain to the patient, his family and his neighbors. It deals in great detail with the indications for home and sanatorium treatment. A complete plan is presented for the *modus operandi* of the sanatorium and dispensary. The author stresses the duty of the physician to the patient and to the public. It presents the modes of treatment that are to be utilized and the facilities to be employed in prevention of tuberculosis spread in the community. Although differing in some minor considerations with the theories advocated, the reviewer judges

the points of difference so negligible as to need no comment.

I. L. ROBBINS, M. D.

Endocrine Medicine: By William Engelbach, M. S., F.A.C.P., B.S., M.S., D.Sc. Springfield, Ill., Chas. C. Thomas, 1932. v.4: Index-Bibliography Index of Names, Index of Subjects. pp. 117.

The most noteworthy feature of this Index volume is that it contains 50 pages of classified bibliography, which should be of inestimable value to those interested in the subject of Endocrine Medicine.

The index of subjects is analytical and inclusive pagings are given. The author and editor are to be congratulated on a very careful piece of work, which by its completeness greatly augments the value of the three main volumes.

I. L. ROBBINS, M. D.

Diseases of the Eye: By Hofrat Ernst Fuchs. 15th German ed. of the *Lehrbuch fuer Kinderheilkunde*, rev. by Maximilian Salzmann and translated by E. V. L. Brown, M. D. 10th English ed. Philadelphia, J. B. Lippincott Co., 1933. Illus. pl. pp. 641. Price, \$7.00.

The present edition, translated by Dr. E. V. L. Brown, of the University of Chicago, has been greatly reduced in size. Chapters on methods of examination, refraction and operations are omitted, giving the volume 641 pages instead of the 1067 pages of the former edition. The elimination is brought about with the idea that a smaller volume will be more useful to the medical student.

This work of Professor Hofrat Ernst Fuchs on ophthalmology through successive editions, has assisted in making better ophthalmologists the world over. His textbook has stood the use of time and today is used by every thinking ophthalmologist as reference and proof of the correct clinical findings in a given subject. Any criticism the reviewer may make applies only to the inclusion and arrangement of the present English edition and not to the work of Professor Fuchs.

This latest edition contains little new material and omits a great deal of value. Even the work of Dr. Alexander Duane on refraction, recommended for inclusion by Dr. Fuchs in his note of authorization, has been eliminated,—a great mistake in the opinion of the reviewer. If, instead of omitting Dr. Duane's work, Dr. Brown had added notes and opinions from his own experience, the present edition would have been three times as valuable. Undergraduates need to be taught the importance of refraction and the careful handling of patients in need of glasses. The method of examination is also important, because a systematic method of examining the eye will show the causative agent, even without an elaborate array of instruments.

The physical make-up of the book is good. The arrangement of chapters is consistent, starting with the anatomy and diseases of the lids and taking up each part of the eye in this manner, from front to back.

The phraseology of the Duane and Brown translations differ so much that it is hard to believe them versions from the same foreign text. Dr. Browns' effort to simplify the text has, in the reviewer's opinion, made it harder to grasp the vital points in the subject. There are quite a few typographical errors in the book. The abbreviations used in descriptive sentences are to be regretted.

From the standpoint of ophthalmic knowledge the book is excellent. From the point of view of inclusion and phraseology, however, the reviewer prefers either the sixth or seventh edition.

FRANK A. OVERBAY, M. D.

Textbook of Materia Medica and Therapeutics:

By Sister Alma, New York, The MacMillan Company. 1933. pp. 329. Price, \$2.50.

This is a textbook for nurses and represents a rather unique and most excellent presentation of the subject it covers. The author has departed entirely from the old stereotyped arrangement and has succeeded in presenting her material in an attractive and instructive form.

The U. S. P., N. F., and N. N. R. are given prominence as should be done in all medical literature. The Narcotic Law is well covered. Discussion of patent medicines is restrained but emphatic. The nurses are urged to study particularly the drugs that are in common use, but a thorough familiarity with these is demanded. Particular emphasis is laid on the advantages of trying to relate the therapeutic agents to the clinical material. It is interesting to note the suggestion that the nurse in coming off a case should be asked questions such as these:

"What did you teach the patient?

"What did you learn from the patient?

"What questions did you have on this case?

"What references did you use in the study of this case?"

The reviewer was pleased to note the emphasis which the author placed upon the advantage of the nurse's recording the actual amounts of drugs administered and not merely the amount of the stock solution of strength unknown to any but themselves.

There are many drawings, particularly of the central nervous system, which show in a graphic way the areas affected by the more important drugs. This feature cannot be too highly commended.

Such subjects as the prophylactic uses of biologicals, anaphylaxis and toxicology are ably handled.

Your reviewer was so favorably impressed with the excellence of this little volume that he could not get away from the conviction that the members of the Medical Profession would find their time well spent if they also added it to their desk equipment—and used it.

OSCAR W. BETHEA, M. D.

Physiology of Bacteria: By Otto Rahn. Philadelphia, P. Blakiston's Son & Co., Inc., 1932. pp. 438.

This text undoubtedly covers its subject very well, but, I believe, that it would not hold the interest of the average reader, unless one is very much interested in the subject.

ANDREW V. FREDERICK, M. D.

PUBLICATIONS RECEIVED

Paul B. Hoeber, Inc., New York: Ten Years of Obstetrics and Gynecology in Private Practice, by John L. Rothrock, A.E., M.D F.A.C.S. Clinical Aspects of the Electrocardiogram, by Harold E. B. Pardee, M. D Light Therapy, by Frank Hammond Krusen, M. D.

W. B. Saunders Company, Philadelphia: Operative Surgery by Warren Stone Brickham, M.D., and Phar. M. (Tulane) E.A.C.S. (Columbia). Practical Hemotological Diagnosis, by O. H. Perry Pepper, M. D and David L. Farley, M. D.

The MacMillan Company, New York: The Interpretation of Dreams, by Sigmund Freud, M. D., LL. D.

Charles C. Thomas, Springfield: Intracranial Tumors, by Percival Bailey, M. D.

The Johns Hopkins Press, Baltimore: Allergy and Immunity in Ophthalmology, by Alan C. Woods, M. D.

Midwest Publishers Company, Minneapolis: American and Canadian Hospitals, by James Clark Fifield.

The University of Chicago Press, Chicago: The Costs of Medical Care, by I. S. Falk, Ph.D., C. Rufus Morem, Ph. D. Martha D. Ring. The Incidence of Illness and the Receipt and Costs of Medical Care among Representative Families, by I. S. Falk, Ph.D., Margaret C. Klem, Nathan Sinai, D.P.H. The Bility of Pay for Medical Care, by Louis S. Reed, Ph.D.

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MEMORIAL ORATION: LOUISIANA STATE MEDICAL SOCIETY*

JAMES Q. GRAVES, M.D.

MONROE, LA.

My friends, we have assembled today to pay tribute to the fallen heroes of service. As a gallant soldier of battle knew his duty, and was devoted to his cause, they too, knew duty and served a noble conquest. A conquest of saving lives. During the battles for scientific experiments, the medical profession carried the banner of inspirational hope. It served as a cross of victory to those in distress. Concealed in their breast was a vision, that when released by their untiring efforts, brilliantly illuminated the pathway for us to follow. Along their professional pathway they paused daily to soothe and encourage a broken spirit and an aching heart. I think there is no act so near to God as the splendid unselfish and unsacrificing service as was rendered by the noble physician. They gave to the sick and suffering their time and skill in a generous manner. Always sacrificing their energy and strength for the benefit of the suffering. Self was insubordinated to the ideals of their Profession.

These heroes of medical science reach in an unbroken chain from Hippocrates, Pasteur, Lister, Roentgen and hundreds of others down to our own distinguished associates, who answered a call of the Great Divine during the past year, leaving their work of

service on this earth, to pass on to the Great Beyond.

One would suppose that physicians, whose lives are spent in preventing and curing disease in others, might themselves secure exemption from it; or at least prevent the cause that brings disease and decay which their skill has turned aside from so many others, that they might attain unusual longevity. But not so; on the scroll of King Death we are but men like other men, that have no exemption, but are bound to Him by the same laws of mortality. Being subject to perpetual wear and tear of body and mind we suffer sickness, and are deprived of mental or bodily health, we travel rapidly and unrestrained toward His realms. We pay Him the natural debt, and fill an early grave as often as other men. And when departing we leave behind us a rich heritage.

An excellent example for us to emulate, is to wear a pleasant countenance, and to cultivate a cheerful mental temperament, for they are a never-failing stimulant, that diffuses sunshine, cheers the timorous, dispels the fog of hopelessness and encourages the despondent. The cheerful, discreet, and pious physician, one of the servants of the Most High God, who, "with a face like a benediction" confines himself to his true vocation, healing the maladies of the body, applying salutary balms to the wounded consciences, binding up the broken hearted and comforting those in distress, are the leaders of thought and action today, and are ever bearing forward the banner of medical progress and making the torch of truth and light shine over the hilltops of medical discovery.

They have gone on ahead of us, but the

*Read before the House of Delegates, Louisiana State Medical Society, April 24, 1933.

activities of the medical profession are still left, because of their contributions. Their peaceful rest is fittingly characterized in these beautiful lines from Longfellow.

“Daily the tides of life go ebbing and flowing beside them,
Thousands of throbbing hearts, where their's are rest and forever,
Thousands of aching brains, where their's no longer are busy,
Thousands of toiling hands, where their's have ceased from their labors,
Thousands of weary feet where their's have completed their journey.”

Our hearts have been saddened by their departure from this earth, these brave soldiers of our profession. If they are listening in to-day and could speak to us on this occasion they would say:

“Grow strong my comrade—that you may stand
Unshaken when I fall; that I may know
The shattered fragments of my song will come
At last to finer melody in you;
That I may tell my heart that you begin
Where passing I leave off, and fathom more.”

DR. GEORGE CLAIBORNE ANTONY was born in 1891 and died in a sanitarium at Oklahoma City, Oklahoma, on December 12, 1932. He was graduated from the University of Tennessee, College of Medicine in 1918. Dr. Antony practiced at Alexandria, Louisiana. He was a member of the Rapides Parish Medical Society, Louisiana State Medical Society and American Medical Association. He is survived by his widow, one son and one daughter.

DR. BEN EDWARD BARHAM of Oak Ridge, Louisiana, was born in 1885. He was graduated from Tulane University Medical School in 1912. He died in Monroe, Louisiana, on March 24, 1933, and is survived by his widow, two sons and a daughter.

DR. WALTER F. CARSTENS was born in Shreveport, Louisiana, in 1875, and died at his home in New Iberia on February 19,

1933. He was graduated from the Medical Department of Tulane University in 1901, and interned at Touro Infirmary and Charity Hospital in New Orleans. In 1903 he located in New Iberia where he practiced until several months before his death when a serious heart ailment forced him to give up his work. At the time of his death he was serving as City Health Officer of New Iberia. In previous years he had served as Secretary-Treasurer of the Iberia Parish Medical Society. Surviving him are his widow, who was formerly Miss Mary M. Andionico, three sons, two daughters, two sisters, and two brothers.

DR. GEORGE F. COCKER was born in Brenham, Texas, October 9, 1863. In his early youth he came to New Orleans where he attended the city public and high schools and later Tulane University Medical School from which he was graduated in 1898. He was a member of the Orleans Parish and Louisiana State Medical Societies, being one of the oldest members. He was, also, a member of the Southern Medical Association, and the American Medical Association. Dr. Cocker was physician to the German Protestant Home for the Aged for over twenty years. His daily visits to the Home and his untiring care of the inmates makes his death a great loss to this institution and a real sorrow to the aged and infirm. He was an active worker in the 14th Ward Civic League, having held numerous offices in this organization. He died on February 12, 1933. He is survived by his widow, the former Miss Florence Albers, three sisters and one brother.

DR. HENRY DASPIT, a native of New Orleans, Louisiana, was graduated in 1907, from the Tulane Medical School. After serving two years as an interne at Charity Hospital he was appointed instructor in general medicine at the Tulane Medical School. Dr. Daspit was at the time of his death professor of neurology and psychiatry at Tulane University, dean of the post-graduate medical school, and neurological consultant of the U. S. Public Health School, Illinois Central Hospital, Eye, Ear, Nose and Throat Hospi-

tal, Touro Infirmary, and the City Hospital for Mental Diseases. Aside from these he was a member of the advisory board of Flint-Goodridge Hospital, and he took an active part in the affairs of the American Hospital Association and Prison Reform Association. He was a member of the Trinity Episcopal Church, Masonic Order, Delta Kappa Epsilon Fraternity, Phi Chi Fraternity, the Boston, Louisiana and Round Table Clubs. Dr. Daspit died on December 19, 1932. He is survived by his mother, Mrs. Elizabeth Winslow Daspit, a sister and two brothers.

DR. SYLVAN DENUX, Marksville, Louisiana, was born in 1879, and died on July 5, 1932, in the Baptist Hospital at Alexandria, Louisiana, of septicemia. Dr. DeNux was graduated from the University of the South Medical Department, Sewanee, Tennessee in 1900. He was a member of the Avoyelles Parish Medical Society, the Louisiana State Medical Society, and the Louisiana State Board of Health. He was also coroner of Avoyelles Parish. He was a member of the House of Delegates from Avoyelles in 1930, 1931, 1932. He was a member of the Avoyelles Parish Medical Society, of the State Society, and served as President of his local unit (Avoyelles) 1924-1925.

DR. PAUL J. GELPI was born in New Orleans fifty-seven years ago. He graduated in medicine at Tulane University Medical School and did three years of postgraduate work in Paris, Vienna and Berlin before returning to practice in New Orleans. He was identified early in life with the Carnival organizations in New Orleans and was an active clubman for years, belonging at the time of his death to the Chess, Checkers and Whist Club. He formerly was a member of the Boston and Louisiana Clubs. He was, also, a former president of the Orleans Parish and Louisiana State Medical Societies, belonged to a number of national medical organizations and honorary bodies and was on the visiting staffs of Charity Hospital and Hotel Dieu. Dr. Gelpi died on July 19, 1932. He is survived by his widow, the former Miss Annette Hincks of New Orleans; six sons, three daughters and four brothers.

DR. ADDLEY HOGAN GLADDEN was born near Homer, Louisiana, on December 4, 1865. He obtained his early education at the Homer High School and afterwards entered Moore Commercial College in Atlanta, Georgia. He was graduated from the Tulane Medical School in 1888, and practiced in Homer until 1894, when he moved to Monroe, Louisiana, where he soon became an outstanding physician and was in active practice until 1916. During the World War, Dr. Gladden held the rank of captain, stationed at Camp Jackson, South Carolina. He served at one time as a member of the Louisiana State Board of Health. The later years of his life were spent in writing life insurance, and he soon established quite a reputation for himself because of the enormous amount of insurance that he wrote. He died at his plantation home south of Monroe on June 9, 1932, from chronic nephritis. He is survived by his widow, two daughters and one son. The son is Dr. Addley Gladden of New Orleans.

DR. CLAUDE M. HARRIS was born at Arizona, Claiborne Parish, Louisiana, on May 5, 1874, son of Austin Harris and Rettie Milner Harris, whose native state was Georgia. Dr. Harris was a self-made man, having received his education largely by his own efforts. He was graduated from the Medical School of the University of Tennessee at Nashville, in 1897. He returned to his native Parish where he practiced for two years, moving to Rapides Parish about 1900, where he spent the greater part of his professional life. The last ten years of which were spent at Cheneyville, in Rapides Parish, where he enjoyed an extensive practice. Dr. Harris died at the Lecompte Sanitarium on October 6, 1932, following an illness of only a few days. He is survived by his wife and four children.

DR. HASTON VARNADO JONES of Bogalusa, Louisiana was born in 1882. He graduated from the school of Medicine, Tulane University in 1909. He was President of the Washington Parish Medical Society, and a member of the Louisiana State Medical Society. Dr. Jones died on May 15, 1932.

DR. ROBERT PERRY JONES, best

known and loved and respected as Dr. "Bob" Jones, was born near Clinton fifty-nine years ago, and was a son of the late Dr. Joe. Stuart Jones and Sara Irwin Jones. The family moved to Jackson where Dr. Jones got his first education at old Milwood College. He also attended Centenary College at Jackson and from there to Louisiana State University where he was graduated, then went to Tulane Medical School. He was then an interne at Shreveport, and also attended Fort Worth Medical College where he obtained his professional degree. Dr. Jones began his medical practice with his uncle, Dr. Emmett Irwin, in Clinton and then continued by himself until twenty years ago when he moved to Baton Rouge where he immediately became prominent in medical circles. Dr. Jones was a member of the East Baton Rouge Parish Medical Society, of the State Medical Society, and of the American Medical Association. He was a member of the Masonic order and in his college days was an active member of the Sigma Nu fraternity. He died on May 23, 1932, and is survived by his widow, the former Miss Mary Irwin of Clinton, one daughter and two brothers.

DR. ELLIOTT KIBLINGER was born in Jackson, Louisiana, fifty-nine years ago. He was graduated from the Memphis Hospital Medical College. He then entered practice at Jackson and worked there until the World War when he joined the medical corps with the rank of captain. After the war, Dr. Kiblinger came to New Orleans and took up the general practice of medicine, as well as to devote himself to research. He was connected with the Presbyterian Hospital, and was a member of the First Methodist church. He died on November 30, 1932, in New Orleans. He is survived by his widow, Dr. Ada Schwing Kiblinger and one daughter. His only son died about six months ago.

DR. JOHN DRAKE KILGORE was born in Claiborne Parish in 1883. He was graduated from the Memphis Hospital Medical College in 1910, later serving as an interne in the Marine Hospital of Memphis, Tennessee. He then began the practice of medicine in Webster Parish, Louisiana, where he has

been an active physician and surgeon for the past twenty-two years. He was a member of the Webster Parish Medical Society and the Louisiana State Medical Society. Post graduate work was pursued at New Orleans, Dallas and New York Polyclinics. He served as president of the Webster Parish Board of Health for a number of years. He was one of the Minden physicians who devoted much time and effort in erecting the Minden Sanitarium, and was treasurer and stock holder of this institution at the time of his death. Dr. Kilgore died in the Minden Sanitarium on July 27, 1932, as a result of internal injuries received in an automobile accident while returning from a call on the Lewisville Highway on July 4, 1932. He is survived by his widow, mother and six brothers.

DR. ALFRED CLINTON KING was born at Mounds, Louisiana, in Madison Parish on December 17, 1868, the son of the late W. B. King, Louisiana planter, and Mrs. Julia Frazier King. He was educated in private schools in Baton Rouge. In 1895 he was graduated from the Tulane University Medical School, since which time he has practiced medicine in Algiers. In 1911, Dr. King joined the surgical staff of the Charity Hospital and was at once made assistant to the Chair of Surgery in the Tulane Post Graduate School of Medicine. In 1921 he was appointed senior visiting surgeon on the hospital staff, and in 1932 was elected head of the Surgical Department to the Chair of Surgery in the Post Graduate School. At the death of Dr. Henry Daspit, Dean of the Graduate School, the position was offered to Dr. King, but, being in frail health he feared he could not give the time and energy required and decided to refuse the offer. Dr. King was a fellow of the American College of Surgeons; a member of the American Medical Association, Southern Medical Association, Louisiana State Medical Society and Orleans Parish Medical Society. Also, a member of the visiting staff of the Charity Hospital and Hotel Dieu. He died on April 1, 1933, and is survived by his widow, the former Miss Minnie Thompson of Delhi, Louisiana, three brothers and two sisters.

DR. VICTOR LEHMANN, eighty-two years old, died at the home of his daughter, Mrs. Lawrence Vitrano, in Norco on September 12, 1932. He was a graduate of Tulane in the class of 1889, and entered the medical practice at Hahnville. For more than thirty years he served as coroner of St. Charles Parish. He is survived by two daughters by a first marriage and four sons and two daughters by his second wife.

DR. V. A. MILLER was born at Grand Chenier sixty years ago. He graduated at Vanderbilt Medical School in 1895, and has practiced in Lake Arthur since that time. He was Jeff Davis Parish Coroner for more than twelve years and prominent in Southwest Louisiana medical circles for thirty-eight years. He was past president of the Seventh District Medical Society, a Methodist, Worshipful Master, Live Oak Lodge No. 346, Masons of Lake Arthur. Dr. Miller died on April 18, 1933, following a lingering illness of the heart. His brother, Ed Miller of Jennings was a former district judge, and other relatives include prominent medical men and attorneys in Louisiana and the East. He is survived by his widow, two sons and two daughters.

DR. BAXTER STAPLES PORTER, son of the late Rev. W. J. and Carrie Staples Porter, was born at Eunice, Louisiana on October 10, 1898. Most of his life was spent in preparation for his chosen field of endeavor, that of a Genito-Urinary Surgeon. His high school diploma was obtained from Bienville High School in 1914, and his A. B. from Meridian College in 1920. He was inducted into the service in 1918 and served about eighteen months, stationed on the Great Lakes and Hampton Roads, Virginia. In 1928 he was graduated from the Medical Department of the University of Arkansas. He did Post-Graduate work at the New York Post-Graduate Medical School and Hospital and at John Hopkins University. In 1930 he began the practice of his specialty in Monroe, Louisiana. On May 30, 1932, he was called to the home of a very close friend who shot him to death while laboring under a mental derangement of sudden onset. He

was a member of the Ouachita Parish and Louisiana State Medical Societies. Also, the American Legion, Masonic Order and the Methodist church.

DR. ALFRED A. PRAY, life long resident of New Orleans, and a graduate in medicine of Tulane University, died at Touro Infirmary, November 7, 1932. He was a member of the Orleans Parish Medical Society. He never took an active part in organized medicine, but, devoted his entire time to the practice of his chosen profession. He was never married.

DR. EARNEST A. RAPPANNIER was born in New Orleans in 1872 and died on October 9, 1932, after a lengthy illness. He was a member of the New Orleans Lodge of Elks, Palmetto No. 2 Lodge of the Woodmen of the World, the Orleans Parish Medical Society and the Hemlock Benevolent Association. Dr. Rappannier is survived by his widow, the former Miss Margaret McCarthy, of New Orleans; his mother and two sisters.

DR. MARCUS CLIFFORD REEVES, of Vidalia, Louisiana, was born in 1875. He was graduated from the Baltimore University School of Medicine in 1897. He was a member of the Louisiana State Medical Society and the American Medical Association. He died on May 2, 1932.

DR. ANDREW SHUTTLEWORTH REISOR, of Palmetto, Louisiana, was born in 1883. He was graduated from the school of Medicine, Tulane University in 1907; was a member of his Parish Medical Society, and the Louisiana State Medical Society. He died on December 9, 1932.

DR. PAUL LOUIS REISS was graduated from the Medical Department of Tulane University in 1890. Immediately he left for Europe and matriculated at the University of Paris where he received his diploma in 1894, having devoted a great part of his time to the eye. Following his studies in France he spent two years visiting the various clinics of Berlin and Vienna and received instruction from the outstanding specialists of that time. In 1896 he returned to New Orleans and entered practice which he continued up to the time of his death. He was a member of the

Boston Club, the Chess, Checkers and Whist Club, the Round Table Club and the New Orleans Country Club. Dr. Reiss died on September 12, 1932.

DR. ALVA G. THOMAS, of New Orleans, Louisiana, was born in 1890. He was graduated from the Indiana University in 1917. He was a member of the Orleans Parish Medical Society and the Louisiana State Medical Society up to 1931, when he moved to Salt Lake City, Utah, where he died on July 21, 1932. He is survived by his widow.

DR. JOHN N. THOMAS, age seventy-two, former superintendent of the Central Louisiana Hospital for Insane at Pineville, died on September 19, 1932, in Alexandria. He was a graduate of Tulane University in the class of 1886; and a member of the American Psychiatric Association. Dr. Thomas was first married to Miss Anna B. DePass of New Orleans. Of this marriage two children survive him. Later he married Miss Wetz Jones of Baton Rouge, who with four sons survive.

DR. FRANCIS MARION THORNHILL, of Arcadia, Louisiana, was born in 1849. He graduated from the Medical Department of University of Louisiana in 1872. He was a past president of the Louisiana State Board of Medical Examiners, and was elected to honorary membership in the Louisiana State Medical Society in 1915; also, a member of the American Medical Association. He died on December 5, 1932, of arteriosclerosis.

DR. JOSEPH DANIEL TUTEN, was born in Jasper, Florida. He received his medical degree from Vanderbilt in 1900, after which he was graduated from the Post-Graduate School of the New York Poly-clinic. He practiced for three years in Pickering and Borham, Louisiana, and then moved to New Orleans where he practiced for three years, being on the staffs of Touro and Charity Hospitals during that time. In 1910 he located in Lake Charles where he was an active practitioner and surgeon up to the day of his death. Dr. Tuten served as President of the City Board of Health, President of the Calcasieu Parish Medical Society, President of St. Patrick's Sanitarium and

was for twenty-one years chief surgeon for the Missouri Pacific Railroad in the Lake Charles district. He was also a member of the American Medical Association. He died in Lake Charles, July 13, 1932, at the age of fifty-five years of angina pectoris. He is survived by his widow the former Miss Lela Adams of Ruston, Louisiana, a son and two daughters.

Dr. PENNUEL COLUMBUS WORLEY, of Shreveport, Louisiana, was born in 1873. He was graduated from the Memphis Hospital Medical College in 1899; was a member of the Shreveport Medical Society and the Louisiana State Medical Society. He died on July 21, 1933, and is survived by his widow, four sons and three brothers.

THE LITTLE THINGS IN WHICH CAN-
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JOSEPH COLT BLOODGOOD, M. D.

BALTIMORE, MD.

I have been studying and practicing the best way to present to the public and to the medical and dental profession, with illustrations, the little things that may precede cancer or may be the beginning of cancer; the little things which, if recognized in time, mean that cancer can be prevented or cured. In contrast to these little things, we present the pictures in lantern slides of the neglected cancers which originated in these little things. The individual was perfectly aware of the little things, but absolutely ignorant of the danger of delay. For example, in 1894, thirty-six years ago, one of the patients in Johns Hopkins with a huge fungous tumor occupying the right temple asked me, after I had completed the history, whether it was "ripe enough to be operated on." This patient had ob-

*The Eighth Chaille Memorial Oration, read before the Orleans Parish Medical Society, December, 1932.

served a little nodule the size of a pea for ten years and had watched it grow, form a scab and ulcerate and produce a fungus. During this time there was no pain, no discomfort of any kind; she was not influenced by its disfigurement. She was an old-fashioned mother who gave more thought to her children and her husband and the care of the home than to her own comfort and appearance. And now she wanted to know whether "it was ripe enough to operate on it." Modern surgery, with its anesthesia, antisepsis and asepsis, removed this huge fungous growth without difficulty. The cancer was a superficial one and had not infiltrated beyond a point when it could not be removed locally. The large area was then grafted. The cancer never reappeared in the locality of its origin. But the patient died of internal metastasis, because during this period of delay cancer cells entered the blood vessels or lymphatics, were carried like chips on a stream, were caught in various parts of the body, and those cells that lived grew until the new tumors destroyed the life of the patient.

Now, this woman who had carried this skin defect on her temporal fossa was aware of it for ten years; the family knew all about it; her family physician must have seen it when he came to attend her for a cold. Her children and her grandchildren knew of its presence. But all of them were ignorant of the danger of that little skin nodule.

My first lecture to the public was in Hagerstown, Maryland, in 1913, under the auspices of the local medical society. Samuel Hopkins Adams, invited by my colleague, Dr. Cullen's Committee of the American Congress of Surgeons, had collected his data and written his paper for the Ladies' Home Journal, McClure's Magazine and Collier's Weekly. The American Society for the Control of Cancer had been organized and had already succeeded in commanding a good deal of newspaper publicity. A great many medical societies were organizing lectures to the public. Both Dr. Cullen and myself used lantern slides. Dr. Cullen's subject was cancer of the cervix and uterus, and mine, cancer in general. This lecture was later published on the editorial page of the Baltimore Evening Sun. During these twenty

years I have been rewriting, under various titles, what every doctor should know about cancer and what every child should know about cancer. It can be written and illustrated differently every few years. In the beginning we could only illustrate late cancer and prophesy what we could do for early cancer. Now we have lantern slides of all the little things that precede cancer and of the early stages of cancer, and we have accumulated the facts to prove that cancer of the skin, of the mouth and the cervix of mothers, and of the nipple of the breast, are preventable diseases. We are not the first prophets, but we are the first who have lived to see out prophecies come true.

Let me contrast here for a moment the difference between the cancer of the old lady, the patient in 1894, with the janitor of an apartment house in Baltimore in 1933. Remember, the old lady waited ten years until the tumor had become a fungus, and wanted to know whether "it was ripe enough to be operated on." This janitor may have been just as ignorant, but fortunately the people about him knew the danger of neglecting the little things visible on the skin. A colleague of mine, a pediatrician, in going down the elevator noticed a nodule the size of a pea on the temporal fossa of this janitor. At one point it had begun to ulcerate. He called me up by telephone and, as the janitor left work at four-thirty, he was advised to come to the clinic. Within ten minutes he was in the little operating room, and under local anesthesia the nodule was removed with the proper margin of healthy tissue. A frozen section was made demonstrating that the proper margin had been given the tumor. The tumor was a subepidermal nodule of basal epithelial cells which had ulcerated and become malignant. The janitor was back at work at six o'clock and lost a little time later for one dressing. We may be quite certain that there will be no recurrence and no metastasis.

We now know that no beautiful woman develops cancer of the skin, because she pays attention to the first skin blemish. The wife of a well-known senator reading this statement in the morning paper, said to her husband: "If I had that mark on my nose, I would have it looked at by a doctor." The senator was at the

clinic the next day, received the same treatment as the janitor and with the same result. Some ten years ago I used to see beautiful women with cancer on one side of the nose due to the neglect of irritation caused by the pressure of the never-slip glasses. This apparently has disappeared entirely due to newspaper publicity. Within a few months, in getting my glasses changed, the optician said: "Let me show you the new never-slip glass which protects from irritation that may cause cancer", and I am wearing this glass tonight.

PAGET'S DISEASE OF THE NIPPLE

Paget was the prophet who did not live to realize the truth of his prophecy. Some eighty years ago he described a condition of the nipple in which the nipple was replaced by an ulcer and the breast indurated. These women told Paget that they had first noticed some irritation of the nipple with redness and itching, and the nipple became covered with scabs. There were two prominent types—the red, granular nipple, and the nipple covered with a scab. It makes no difference; every one of the women knew she had an irritation of the nipple, but she paid no attention to it, or, if she consulted a doctor he paid no attention to it. The condition was usually called eczema. But when the nipple had ulcerated and the breast had become hard, then these women thought it was "ripe enough" to consult a surgeon. As far as I can find out Paget's disease as described by Paget, has never been cured by the most complete surgery, with and without irradiation, or whether the irradiation preceded or followed the operation. In 1924, in the Archives of Surgery, I presented my entire experience with Paget's disease. Fortunately, at that time I had observed some cases of the little things described by Paget. Some of these, when operated on, proved to be benign and the patient lived. Others were cured without operation by a simple remedy suggested by Paget. Today, nine years later, we have further evidence to confirm all the statements made in the paper of 1924. Every woman should know, and the time to teach her is in the postnatal period, and all young and old women should be informed by the medical profession and public health departments through the press and in the school books on preventive medicine, that any

neglected irritation of the nipple when nursing a child is apt to lead to a mastitis or infection of the breast which may produce an abscess. The same neglected irritation of the nipple, while not nursing a child, may lead to cancer as first described by Paget. The nipple is no different from the skin, except it is more difficult to keep it clean, and still more so when the nipple is retracted.

It is my rule, if the irritation of the nipple is of short duration, to try the protecting treatment for two or three weeks. The nurse teaches the patient the technic. After the vaseline is put on the nipple, a small square piece of gauze covers the nipple and is fixed with adhesive straps. If the irritation does not disappear, or on first examination, it is suspicious that it has reached a stage from which we can not expect recovery by simple means, the patient is admitted to the hospital and prepared for the complete operation for cancer. Then the nipple and the areola with a small zone of skin are excised under local anesthesia with a cone of breast tissue beneath. Frozen sections are made of the irritated area of the nipple, and a number of sections are made of the ducts and breast tissue beneath. If the picture indicates benignancy, nothing more is done and the wound is closed. If there is any evidence of malignancy in the nipple or ducts, the complete operation for cancer is performed.

In the first ten years, up to 1900, we observed Paget's cancer of the nipple only in the late stages. My paper in 1924 records the beginning of the less malignant cases in which the cancer is confined only to the nipple, and then, later the beginning of the benign lesion, and then a few cases cured without operation. Today, among the cases observed by us, no-operation cases predominate; next those in which only the nipple is excised. Paget's cancer of the nipple is becoming very rare among all classes of women.

A physician should always see any skin defect, like a wart or a mole, whether pigmented or not, or a nodule, whether in or beneath the skin, to decide whether it should be removed at once or left alone until it gets larger. The late Dr. W. W. Keen, and myself independently, in 1902, advised the removal of all elevated warty

pigmented moles and of all pigmented areas beneath the nails, or in areas subjected to trauma, like by a razor, a belt, a suspender. In evidence of how this correct information has become diffusely disseminated, I was consulted within a few days by a man aged thirty-five. His physician had removed from the skin of his back a wart and an elevated pigmented mole. They were not saved for microscopic study. The patient has recently been examined for life insurance and passed all the tests, but has been turned down, because the mole was not studied microscopically to determine whether it was benign or malignant. We now must inform the public and the profession that when any kind of a skin defect is removed, especially a mole, it must be subjected to microscopic study and the section preserved. It is important to record here that the American College of Surgeons has attempted, from the very beginning of its existence, to establish the rule in all standardized hospitals, that all tissue removed from patients be sent to the laboratory for microscopic study and records.

Any irritation of the skin, any little spot that is rough, or looks irritated should be washed with soap and water, using cotton, washed off with medicated alcohol and then covered with a little vaseline or yellow oxide of mercury (2 per cent). If, in a few days, the lesion does not disappear, the treatment should continue, but a bit of cotton should be put over the vaseline or yellow oxide of mercury and fixed with collodion. Then, if it does not disappear, one should see one's physician. The cotton and a small bottle of medicated alcohol, the tube of vaseline or yellow oxide salve should be part of every toilet set, and the care of the skin should be taught to children and adults just as much as first aid for cuts and bruises. Fully developed cancer of the skin is a disease of dirt, ignorance and neglect. The greater the vanity of personal appearance, the less the danger of cancer of the skin. Since the new fashion of the low-cut back, I have been fortunate to observe, on the backs of some of my colleague's wives, very dangerous looking black moles and have succeeded in getting them removed.

THE BREAST

Although I have written this many times for

the public and for the profession, in the past year I have been able to rewrite it from a different point of view. The studies of chronic cystic mastitis of the breast published in the Archives of Surgery for 1921, have been repeated with the new material of almost twelve years. This new material is largely chronic cystic mastitis not subjected to operation. The new diagnostic test which has allowed us to recognize the single or multiple blue-domed cyst is the transillumination light introduced by my former student, friend and colleague, Dr. Max Cutler, Director of the Tumor Clinic of Michael Reese Hospital in Chicago. As the number of women reached through the press and other channels of publicity increases, the number of women who consult doctors within the first month after their first symptom calling attention to the breast, the most common disease is chronic cystic mastitis. When one hundred women are examined within the first month of the first symptom and repeated transillumination is employed in addition to palpation and inspection, eighty-five per cent of the women will not be subjected to operation, and will run no risk. When women delay, chronic cystic mastitis tends to spontaneous disappearance, and rarely persists for more than a few months or a year. The per cent of tumors that transilluminate dark increases, and with it the percentage of cancer increases. Every general practitioner who examines a breast should have at least two flash lights of the small pocket type. The most serviceable should have a screw arrangement at the end opposite the light. The essential thing is a dark closet, and not an expensive light. The next essential thing is that the examination be made without knowing which breast is involved. Both breasts should be transilluminated and then most carefully inspected and palpated with the patient stripped to the waist, and both sitting up and lying down. Transilluminate first. Most tumors transilluminating dark will be found at once. Chronic cystic mastitis is a bilateral disease. It produces the "shotty" breast which may have a distinct edge. It produces the "lumpy" breast and cobble-stone breast described by Warren of Boston. It produces the dilated ducts beneath the nipple which palpate like varicocele. It produces the single and mul-

tiple blue-domed cyst which transilluminate clear, while solid tumors of the same size transilluminate dark. It produces a definite single tumor which transilluminates dark and can only be differentiated from cancer when explored, removed or subjected to frozen section. Under the microscope, this single tumor does not differ from the "shotty" breast, or the lump, or the cobble-stone breast, but all stages of chronic cystic mastitis, under the microscope, must be known to the surgical pathologist. Otherwise too many breasts will be sacrificed on the diagnosis of "suspicious of malignancy."

Every general practitioner, every interne, everyone who makes a general examination must be familiar with the new interpretation of breast lesions by inspection, palpation and transillumination, and the one disease that the entire medical profession even today knows too little about, is chronic cystic mastitis. My associates in the Surgical Pathological Laboratory of the Johns Hopkins University compiled for me as a Christmas present the most important statements on cystic breasts and chronic cystic mastitis from Sir Ashley Cooper (1831), Sir Benjamin Brodie (1846), A. Velpeay (1856), Paul Reclus (1883), and C. Schimmelbusch (1892). My contributions to chronic cystic mastitis began in 1893. Listen to what Cooper said one hundred and two years ago: "These diseases of this organ have been too much considered as being of a malignant nature, and females, who have had the misfortune to have tumors of their breasts, have often very unnecessarily submitted to an operation under the idea of the complaint being cancerous." This is true today.

When the blue-domed cyst, larger than a twenty-five cent piece, transilluminates clear, but annoys the patient physically or mentally, I have found it very practical to aspirate it, just as practiced and advocated by Robert Abbe of St. Luke's Hospital in New York, between 1890 and 1900. When the single definite tumor, smaller than a twenty-five cent piece, present in a normal, shotty, lumpy or cobble-stone breast, transilluminates clear, it is wiser to explore it, just as one explores every single definite tumor that transilluminates dark. The reason for this is that smaller tumors like colloid cancer, may transilluminate clear. However, when these tu-

mors are explored and a definite blue dome is explored, there is no longer any necessity to subject the patient to the complete excision of the blue-domed cyst. Open the cyst wall, confirm its clear or cloudy contents and its smooth wall; take a section of the wall for frozen section. If there is no papilloma and no evidence of malignancy in the wall and no other nodules about the cyst, simply close the wound. In my early cases I swabbed the lining of the cyst with pure carbolic followed by alcohol or with a bit of gauze saturated with fifty per cent solution of zinc chloride, and then drained, temporarily for forty-eight hours. This seems unnecessary. If one explores under novocaine, finds a blue dome, opens the cyst, takes a small piece of its wall for frozen section, and then closes the wound, the patient will be in the hospital but a day or two, while if it is drained, or completely excised, she will be in the hospital for four to seven days. On three occasions, so far, I have given a lantern-slide demonstration to a large group of women on chronic cystic mastitis, with very successful results from an educational point of view. To know that the risk of a cancerous lump is less than ten per cent, when they report within the first month after the first symptom, while if they wait six months or more, the probability of cancer is almost eighty per cent; also, to know that if they report at once, the chances of operation being necessary are less than fifteen per cent, and even when we do have to operate upon certain definite single tumors, the operation is a much simpler affair than ever before, must be very comforting and should urge women to come early.

The transillumination light for the diagnosis of breast tumors must be as universally accepted and employed as the stethoscope. Surgical pathologists in the operating room of the hospitals of this country must familiarize themselves with the varying microscopic appearances of chronic cystic mastitis.

CANCER OF THE CERVIX IN MOTHERS

The contrast between cancer of the cervix in mothers and cancer of the skin and nipple, and cancer of the mouth is dramatic. The majority of the lesions of the skin and mouth today, in enlightened communities, is benign; the ma-

majority of cancers in an early stage, while in cancer of the cervix in mothers the reverse is true. In the largest clinics throughout the civilized world today the five-year cures are recorded as 35 per cent. The classification of the League of Nations of cancer of the cervix is numbered 1, 2, 3 and 4.

Group 1 representing the earliest stage of cancer of the cervix is still the very smallest group, and Group 2, the next most favorable, is the next smallest. It is my opinion that the total number of five-year cures in Group 1 in which the prognosis, after radium, should be 90 per cent, is less than in Group 3, in which the prognosis should be at least 10 per cent. I observed in the charts in Regaud's clinic in Paris and the Marie Curie Hospital in London, that the most decided improvement in the past few years is that Group 4 cases which are almost hopeless, are shifting to Group 3 cases. That is, the educational effort is influencing mothers with cancer of the cervix who have definite symptoms, but is not yet reaching the mothers who have no symptoms. Cancer of the cervix should be discovered in a semi-annual pelvic examination of mothers in which there are absolutely no symptoms—pain or discharge. We now know that cancer never begins as cancer, but that there is first a local growth of cells which differ from normal cells. These cells may be embryonic residues, or cells changed by chronic irritation or injury. For this group of cells which are abnormal but not yet cancerous, the term precancerous is employed by some authorities, and criticized by others. In this stage there is usually no pain or discharge. In the change from the abnormal cell to the cancer cell there may be no pain or discharge of any kind. We can easily observe this in the skin, in the nipple and in the mucous membrane of the mouth. When any local lesion here changes from abnormal to cancer, as a rule the patient is unaware of it, and sometimes the trained eye of an expert cancer student can not detect that the malignant change has taken place. The detection rests upon the biopsy and a frozen section. That is, early cancer is a microscopic disease. To recognize and cure cancer before it is cancer, or in its earliest stages, the old vast knowledge of the clinical picture is becoming

less and less valuable, and even the gross appearance in which so many surgeons have become so proficient, is no longer to be depended upon. These facts are best proved in cancer of the cervix. Protection of mothers from cancer of the cervix rests upon the modern conception of periodic examinations and biopsy, and the cure of cancer of the cervix in this stage may be either by surgery or irradiation. At the present moment, the majority of authorities favor radium, with the addition of roentgen ray treatment in certain cases. In spite of this definite proof of the possibility of prevention and cure, our educational efforts have either not reached the mothers, or, if they have, very few have acted upon it. It is my hope that ignorance rather than fear, is the basis of the lack of progress in the prevention and cure of cancer of the cervix in mothers.

THE ORAL CAVITY

I have just written this again for the dental profession to be published in the Dental Survey. I find that I first presented, with illustrations, this subject to the dentists, in Rochester, N. Y., in July 1914, and it was published in the Journal of the National Dental Association for March 1915. I started this paper with the following statement: "The dentist has a rare opportunity to observe the beginning of certain lesions which may be, or may develop into, malignant tumors."

Inspection of the mouth should be part of every physical examination, and, no matter what the patient consults you for, there should be at least a brief look at the mouth, fauces and nasopharynx with a light, just as there should be an inspection of the cervix in a mother, and a glance at the skin for defects that should be removed or treated. The first changes in the mucous membrane due to the irritation from teeth or plates and aggravated by tobacco in any form, may be painless and not visible to the individual. The normal mucous membrane of the mouth, fauces and nasopharynx is so typical that one recognizes in a moment a change. The moment anything abnormal is seen, the source of irritation should be searched for and removed. There are many ragged, dirty teeth; ill-fitting plates, tobacco in any form are the chief offenders. Vincent's angina ranks next. Then come the tonsils and adenoids and the sinuses.

After that, there must be a general survey, because almost anything may be the cause of an area of irritation in the mouth. I have described these in great detail in the *System of Surgery* edited by Dr. Dean Lewis and published by Prior & Co. of Hagerstown. This will be found in Chapter IV, of Vol. IV.

The chief and great mistake that many physicians and dentists make today is that they do not make a thorough inspection of the oral cavity, and they do not understand or accept that the cause of cancer of the mouth are the irritations of ragged, dirty teeth, ill-fitting plates and tobacco. The removal of these causes should be the first procedure in any preventive or curative treatment.

THE BONE

An old patient of mine came unexpectedly into my office three days ago. I had removed his gangrenous appendix in 1910, and a rare fibrohemangioma from his back in 1920. He simply complained of rheumatism in the left shoulder, and he has suffered with it about six weeks. His physician had given him medicine for it. Roentgenograms were made of both shoulders. The bones on the painless side were normal. The head of the humerus on the "rheumatic" side showed bone destruction in the center of the head with changes in the cancellous bone of an osteogenic type about them. From this picture the lesion could either be a primary malignant tumor, a rare type of osteomyelitis, or a metastatic growth. Immediately roentgenograms were made of the chest, the pelvis, and a lateral view of the skull. There were changes, both, in the skull and in the pelvis which suggest metastasis from an as yet unknown primary lesion. However, when the skull and the pelvis are involved, one must think of Paget's disease. This patient was sent at once to Dr. Kelly and Burnams' Hospital for irradiation over the involved head of the humerus, not only to see whether the pain would be relieved, but whether it will show any effect on the changes in the bone. In the past ten years I have published on a number of occasions what I have called the working rules in the routine examination of bone lesions, during which time the diagnostic survey is completed and non-operative treatment, if indicated, may go on. The first two

non-operative treatments are intravenous arsenphenamin when the Wassermann is positive, and deep roentgen ray therapy. I say roentgen rays, because these are available almost everywhere, while radium in sufficient amounts is not. These working rules will be found published in two chapters of Geschickter and Cope-lands book on Tumors of the Bone, published by the American Journal of Cancer. The rules seem logical and simple, and every member of the medical profession interested in diseases of bone should at least try them out.

Briefly, some of the rules are: Always take a roentgenogram of the opposite bone for comparison. It is a good plan never to omit roentgenograms of the pelvis, chest, lateral view of the skull, and films of the teeth. In this way it will be possible to determine at once whether the single bone lesion is part of a general condition of the skeleton, benign or malignant. The next procedure is a Wassermann test. If there is no pain and no suspicion of malignancy in the roentgenograms, wait for the Wassermann test and, if it is positive, begin the intravenous treatment. If there are pain and a suspicion of malignancy, start the deep roentgen ray treatment at once, and when the Wassermann report comes in and is positive, start the intravenous therapy and discontinue the roentgen ray treatment temporarily. Perhaps the most neglected examination is the blood chemistry, chiefly for calcium and phosphorus, and the palpation of the neck for parathyroid tumors. When the roentgenograms rouse suspicion of a lesion suggesting osteitis fibrosa and there are changes in the blood chemistry, it is wise to give roentgen ray treatment over the parathyroid even when there is no enlargement or no definite tumor. Merritt of Washington, at the bone demonstration in Engineering Hall of Johns Hopkins University, in Baltimore, last September, reported a case in which roentgen ray treatment over the thyroid was followed by the healing of a fracture in a bone in which the roentgenogram suggested osteitis fibrosa. Now that people are coming earlier, we are often seeing a single bone involvement of what would later be a multiple disease of the skeleton. Blood chemistry may suggest a general disease of the

skeleton before it shows definitely in the roentgenogram.

The point I wish to emphasize is this: That every bone malignancy, primary or metastatic, should be given the benefit of a course of irradiation. We must remember that syphilis, osteomyelitis, multiple myeloma, metastatic tumors, have to be considered, even when only one bone is involved. Theoretically, every bone lesion should have a complete examination. This is more difficult in private cases because of the expense. When surgery is indicated, after trial of irradiation has failed, the decision as to the nature of the lesion may rest upon a biopsy. What is the danger, if your pathologist is unwilling to take the responsibility of advising an amputation or resection? Apparently, if there has been irradiation first, one may do a biopsy with as little traumatism as possible, cauterize the wound, close it, continue irradiation and send the sections or tissue to a number of pathological experts on bone diseases. In my first reported case of sarcoma of bone cured by amputation, there was an interval of two weeks between the biopsy and the amputation, and there was no irradiation.

To increase the number of cures of sarcoma of bone, the public needs continuous education, especially the teachers in public schools and parents must know that the first thing to do for a pain or swelling near a bone or joint is to have a roentgenogram. None should be treated for rheumatism, bruise, charliehorse, growing pains, bursitis, arthritis without an roentgen ray study first. We find that the cures of sarcoma of bone in the recorded cases in our laboratory have increased from 4 per cent in 1920, to almost 30 per cent in 1932. The only explanation is earlier roentgen-ray studies and earlier treatment. We have now three positive five-year cures by irradiation alone, and two doubtful cases.

STOMACH

One should be able to detect an organic lesion of the esophagus and stomach including the duodenum by one complete fluoroscopic examination and one or more films.

I know of only two proved carcinomas of the stomach that were overlooked after careful fluoroscopic and roentgen ray examination on

first admission, but detected at a second examination a few months later, and confirmed by operation. The great trouble is that the so-called indigestion is so common that the majority of cancers of the stomach are not studied with the roentgen rays until they have become inoperable. During the bone demonstration the past September a doctor, an old friend of mine and an old patient with Paget's disease of the skeleton, came to the demonstration. I did not realize that he came chiefly because of pain in the ribs on the lower left side. He simply left at my office new plates of the old lesions in the tibia, pelvis and skull, and some plates of the chest and ribs we had not seen before. He sat next to me at the demonstration, he took two meals with me at my home, but for some reason or other I did not get his message of pain in the region of the cardiac end of the stomach or he would have been thoroughly examined with roentgen ray studies of the stomach. He simply left word at the clinic with his roentgenograms that he would like to have me look at the ribs and let him know whether there were any changes in the ribs similar to those in the tibia, pelvis and skull. It was an arrested case of Paget's disease, and I missed an opportunity to get a roentgenogram of an early organic lesion of the cardiac end of the stomach. Three months later I saw the roentgenograms of his stomach with a definite filling defect at the cardiac end and later felt a huge mass filling his epigastrium.

There was no doubt that he had sufficient symptoms even before he came to see me in September to justify a gastro-intestinal study. It is difficult to take proper care of your own family and friends and of colleagues in the medical profession when they mention their ailments casually without coming to consult you in the usual way. Apparently this is a fundamental fault in explaining the little progress in curing cancer of the stomach. Billroth conceived and executed resection of the stomach in 1880, half a century ago. His principles remain accepted today. There is little improvement, except in minor technic. Even in the great Mayo Clinic today, in more than one-half of the cases the mass in the stomach is inoperable. The surgery of the stomach is well established. The

dangers are very small. The problem is how to influence the general public and the general profession to realize that a gastrointestinal study, if there are any symptoms in the upper abdomen, is as essential as the stethoscope and electrocardiogram for the heart, and the transillumination of a mass in the breast.

THE COLON

The problem is identical with that in cancer the stomach, by resection, and we first cured cancer of the left colon, especially the sigmoid, because patients came under observation with obstruction. My first cure of cancer of the right colon, the cecum, was in 1910, while the first cure of cancer of the sigmoid colon by Halsted was in 1895. The warnings of lesions of the colon are colic, intermittent diarrhea and constipation, sudden and unexplained constipation, blood in the stools. These are also symptoms of general and local conditions that have no relation to cancer of the colon, or of the benign polypoid tumors of the colon which have relation to cancer. There is no difficulty in examining the colon properly. We can take a roentgenogram after an enema of bismuth, and examine the colon by fluoroscope and in the roentgenogram. We can use the proctoscope. The difficulty is to get the examination in time. I think the majority of patients consult doctors in time, just as they do for gastric symptoms. But the majority of doctors, even today, do not use these methods of examination in time.

THE RECTUM

With finger and the proctoscope, the rectum is just as visible to the physician as the skin of the mouth or the cervix of the uterus. Every clinic now is getting earlier cases of cancer with many benign polypoid tumors. Kraske's complete resection of the rectum for cancer was conceived about the same time, or a little later, as Billroth's operation for cancer of the stomach, but antedates Halsted's operation on the breast and Wertheim's on the uterus. These names—Billroth, Kraske, Halsted, Wertheim established the principles of the complete operation for cancer. When I came to Johns Hopkins in 1892 there were five or six patients in the hospital convalescing from

Kraske's operation for cancer of the rectum performed by Dr. Halsted. My first Kraske for cancer of the rectum lived thirty-three years. The operation was performed in 1896. The protection from cancer of the rectum and the increase in the number of cures of cancer of the rectum depend upon the rectal examination with the finger and the proctoscope as a part of every routine examination.

SOME INTERESTING OBSERVATIONS ON GOITER*

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Goiter is comparatively rare in this section as compared with the upper Mississippi Valley, and its very rarity probably accounts for many cases of hyperfunctioning goiters going unrecognized until the disease is well advanced. Early recognition of the condition simplifies the treatment and lessens the mortality, thanks to the researches of Kimball and Marine¹ in 1917, who working in an endemic center showed that the ingestion of small amounts of iodine would prevent the development of goiter in children. Since then the treatment of goiter, especially the hyperfunctioning type with thyrotoxicosis, has been revolutionized with great lowering in the mortality rate, as well as in the morbidity rate of this disease.

Some confusion still exists in classifying the various types of goiter, as certain clinics classify them from an anatomical standpoint while by others they are classified clinically. The most commonly accepted anatomical classification as given by Hertzler², and probably the result of the numerous articles by Plummer of the Mayo Clinic is:

1. Colloid goiter.
 2. Adenomatous goiter without toxic symptoms.
 3. Adenomatous goiter with toxic symptoms.
 4. Grave's Disease (Exophthalmic goiter).
- Hertzler is careful to state, however, "In

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following such a classification one must remember that these classes do not represent separate diseases but merely stages, at least for the most part, of one progressive disease. I have many times seen the same individual run the gamut of the whole series: simple colloid, non-toxic adenomatous, toxic adenomatous and finally typical Basedow's trio; and finally death by heart failure."

Means³, of the thyroid clinic of the Massachusetts General Hospital, on the other hand, recognizing the difficulty of making an anatomical diagnosis without a microscopical examination of the tissue, proposes a more simple classification based upon clinical findings, from which, after all we have to depend until surgery has been resorted to, or until an autopsy is held. Goiters according to Means may be classified as:

1. Endemic colloid.
2. Sporadic colloid.
3. Nodular. (adenomatous, cystic, malignant).
4. Exophthalmic.

Deficiency in iodine is the basic cause of all goiters, resulting in hyperplasia of the tissues of the thyroid gland, the several types depending upon the particular tissue which has undergone hyperplasia. Deficiency of iodine causes lack of thyroxin which contains iodine in its molecule, and which Kendall⁴ identified as tri-iodo-dihydro-oxyindol-propionic acid. Deficiency of thyroxin in the tissues and hypothyroidism, according to Plummer⁵, stimulates the thyroid gland, resulting in diffuse hypertrophy of the thyroid. "The secretory processes are altered, hypertrophy disappears and colloid is stored in the cells and a diffuse colloid goiter results. Sustained stimulation of the thyroid gland, in conjunction with unknown factors causes the development of new tissue and non-toxic adenomatous goiter results." Later in life, thyroid containing this new adenomatous tissue may hyperfunction, resulting in toxic adenomatous goiter. Plummer⁶ claims that exophthalmic goiter is a distinct clinical entity and is due to diffuse hyperplasia and hypertrophy of the entire thyroid gland with other factors giving rise to a symptoma-

tology quite different from that of toxic adenomatous goiter. This will be discussed further in considering exophthalmic goiter.

We rarely see colloid goiters in this state, but, if, as is generally accepted, adenomatous or nodular goiters are superimposed on pre-existing colloid goiters, we must be overlooking many of the former.

The practical and interesting question to the internist is whether or not the gland is hyperfunctioning, or hypofunctioning. That symptoms alone are not reliable is well exemplified in the following case.

Case 1: Miss M. B., 38 years of age, first seen by me in Sept. 1926, complained of swelling of the neck in the region of the thyroid, nervousness, rapid pulse, slight tremor of the little and ring fingers, dull headaches and indigestion. The goiter had existed for two years and she had been under the care of an able internist who had prescribed iodine, but there was no improvement. Physical examination revealed a highly neurotic woman with all organs normal except the thyroid gland; a systolic blood pressure of 120, diastolic 80, pulse 100 and slight tremor of the extended hands; no exophthalmos, Von Graefe and Stelwag signs absent. The enlargement of the thyroid gland was apparently limited to the right lobe, which measured approximately 3 cm., was hard, freely movable and slightly tender to palpation. Much to my surprise the basal metabolic rate determined by Dr. Pitkin, was minus 35 per cent. The urine was negative except for a great excess of indican. The blood count was normal with the exception of 3 per cent of basophiles. No iodine was given, but after an initial purgative she was placed on a low protein diet and one grain of thyroid extract was prescribed three times daily. Improvement was noticed almost immediately and in one week the tumor had appreciably diminished in size, being softer in consistency and no longer sensitive. In November 1926, two months after instituting treatment, she was free from symptoms, there was no tumor mass and the thyroid gland could be barely outlined by palpation. She continued to take two grains of thyroid daily until January 26, 1927 when her basal metabolic rate, again made by Dr. Pitkin, was plus 12 per cent. Thyroid administration was stopped for a month and she was instructed to continue one grain daily, thereafter. When seen again in September 1927, she had taken no thyroid extract for three and one half months and had noticed that her neck was again beginning to swell. Dr. Pitkin reported her basal metabolic rate as minus 38 per cent. She was again given thyroid extract, two grains daily, which was fol-

lowed by improvement, but later upon stopping it there was a return of the goiter and her basal metabolic rate in January 1928 was minus 28 per cent. Thyroxin grain 1/160 once a day has kept her free from symptoms for the past three years.

This is an example of non-toxic nodular goiter. Similar cases have been observed by Plummer and he classes them as non-toxic adenomatous goiter and advises enucleation of the thyroid nodule. Time, only, will tell if this gland will later hyperfunction and give rise to thyrotoxicosis, but at present there is no nodule to enucleate and there are no symptoms to guide one. The rapid pulse and tremor were undoubtedly of neurotic origin as she was in daily contact with the medical profession, as a welfare worker, and probably had some knowledge of the symptomatology of hyperthyroidism.

A determination of the basal metabolic rate is essential in all cases of thyroid disease, but to be of any value it must be properly done and sometimes several determinations may be necessary before a true conception of the case can be had.

In considering exophthalmic goiter, it must be remembered that all cases in which the entire gland has undergone hyperplasia with toxic symptoms, are placed in this class. There may, or may not, be eye symptoms and the duration and intensity of the intoxication will determine whether or not there are cardiac symptoms present. Contrary to the opinion of Hertzler, I believe that a proper determination of the basal metabolic rate is the only reliable guide to the function of the thyroid gland. Plummer⁶ considers exophthalmic goiter as a distinct entity and believes that due to some stimulus the gland hyperfunctions after hyperplasia takes place and, in the absence of sufficient iodine to form thyroxin, an "abnormal agent" allied to thyroxin is formed. To this abnormal agent he ascribes nausea, vomiting, diarrhea and eye symptoms which are not present in toxic adenomatous or nodular goiter.

It is not the purpose of this paper to review the symptoms of exophthalmic goiter, nor to enter into any discussion as to whether or not they should be treated surgically after having been brought to a period of rest

by iodine. Rather is it my aim to suggest that intestinal toxemia has a definite bearing on the symptomatology and progress of cases of exophthalmic goiter, and to report a few cases in which this factor was evident.

For over three decades, physiologists have recognized that proteins taken in excess of the body requirements stimulated metabolism, and this action is spoken of as the specific dynamic action of proteins. In nearly all clinics it has been found that cases of thyrotoxicosis do better on a low protein and high carbohydrate diet, while the intravenous injection of glucose is a recognized procedure in the treatment of severe cases. No argument is necessary to prove that intestinal toxemia will markedly stimulate metabolism if fever is acknowledged as a symptom of intestinal toxemia, which is well recognized to-day by all gastroenterologists. In the process of putrefaction in the intestinal canal, tryptophane, one of the amino acids in all proteins, is converted into indol and indol ethylamin. These latter products are definitely toxic but their action on the thyroid glands has never been studied. It is hoped that certain experiments now being conducted in collaboration with Dr. Mahorner of the surgical staff of the University may throw some light on this question. There is strong evidence to suggest that putrefactive processes have a definite influence on the incident of goiter in man and in fish. McCarri-son⁷, working in India, reports some extremely interesting observations. He reports that the incident of goiter in the several villages along a stream is in direct proportion to the pollution of the stream, being less in those villages in the upper stretches of the river, while in the villages on the lower stretches, the per cent of the population who had goiters was very high. He was able to cure those goiters by the use of thymol and other intestinal antiseptics. He was also able to produce goiter in goats by giving them water to drink which had percolated through a trough containing a mixture of soil and human feces. His conclusions based on these experiments, were, that goiter is an infectious process and that the infectious process and

that the infecting agent is in the intestinal canal. That the absorption of putrefactive products cannot be eliminated from consideration is quite evident.

Further, Marine and Lenhart⁸, working in a fish hatchery where they bred brook trout, observed that if the water passed through successive tanks that, while the fish in the first tank exhibited no evidence of hyperplasia of the thyroid gland, those in the lower tanks showed a high incidence of goiter. They also observed that those fish with well developed goiter would promptly recover if moved to uncontaminated water and that iodine had a definite protective influence and curative effect upon the goiters. It is of interest to note that they observed a greater tendency to goiter among the fish if conditions were such as to favor the accumulation of a scum on the bottom and sides of the tank. Again we find experimental evidence of the influence of putrefactive processes on the development of goiter.

As already mentioned, Kendall⁴ has identified thyroxin as tri-iodo-dihydro-oxy INDOL-propionic acid. Does the absorption of indol from the intestinal canal above the power of the liver to detoxicate it, influence the function of the thyroid gland and stimulate it to excessive production of thyroxin, which contains the indol radical? Future experiments and a closer clinical observation of the presence or absence of intestinal toxemia in cases of hyperthyroidism by other observers, especially those in the large thyroid clinics of the country will elucidate this problem. Certainly, the nausea, vomiting and diarrhea, considered symptoms of exophthalmic goiter and also recognized as symptoms of intestinal toxemia, have promptly disappeared in those cases of hyperthyroidism I have observed, after the intestinal toxemia has been overcome.

The following cases are of interest from this standpoint:

Case 2: Miss K. E., 56 years of age, in 1911 had all the cardinal symptoms of exophthalmic goiter, viz—: tremor, nervous excitability, tachycardia and auricular fibrillation, marked exophthalmos and enlargement of the thyroid. There was a persistent indicanuria and intermittent constipation

and diarrhea. On a low protein diet and measures aimed at overcoming the intestinal toxemia, together with the administration of quinine hydrobromide, grains five three times daily, all symptoms of hyperthyroidism disappeared. In 1920 she recovered from a laparotomy by Dr. Allen for a gangrenous appendix with volvulus and kinking of the intestines in two places, and a subsequent appendectomy of the remaining stump of the appendix in 1921, with no recurrence of symptoms of hyperthyroidism. There was no determination of the basal metabolic rate as she presented her symptoms of hyperthyroidism before this procedure had developed into a practical clinical one, and for this same reason she received no iodine. There was never later any return of thyroid symptoms and she died in 1928 from an acute pyelonephritis and cerebral embolus.

Case 3.: Mrs. C. M., 31 years old, in 1913 had a definite goiter with tremor, pulse rate 130, exophthalmos and edema of the ankles and attacks of diarrhea with a strong reaction for indican in the urine. Treatment of her intestinal toxemia and administration of quinine hydrobromide gave almost complete relief in four months with a thyroid gland that could not be palpated, a pulse rate of 88; no tremor, and exophthalmos much less pronounced but still present. On a low protein diet with constant attention to bowel elimination she continued to improve, gained weight rapidly and in six months there was no evidence of any thyroid enlargement, exophthalmos or other symptoms. I saw her again in 1920 with a sub-acute appendicitis for which Dr. Matas performed an appendectomy with an uneventful post-operative history. She still remains well.

Case 4.: Mrs. N. B., 39 years old, when examined in June 1929. A diagnosis of hyperthyroidism had been made by her home physician but rest and iodine had had no effect upon her symptoms, which consisted of tachycardia, nervousness, headaches, loss of 20 pounds in weight in two months; trembling of the hands, knees and feet, weakness, nausea and vomiting. There was a stare but no definite exophthalmos, and only by most careful examination could a slight enlargement of the thyroid gland be found. The heart was rapid, 130 per minute, with clinical evidence of auricular fibrillation, and the urine contained a great excess of indican, being otherwise negative. Her initial basal metabolic rate was plus 51.4 per cent. After an initial purgative, a low protein diet, rest in bed, Luminal of soda, quinidine sulphate and ten drops of Lugol's solution three times daily, all symptoms had disappeared in six days, her urine remaining free from indican and her basal metabolic rate dropping to plus 33 per cent. Treatment of her intestinal toxemia and the administra-

tion of Lugol's solution was continued when she left the Baptist Hospital after a sojourn of only six days, and she was seen at frequent intervals during 1929. She continued to improve and her basal metabolic rate progressively went down, being plus 20 per cent in August 1929 and plus 11.2 per cent in September 1929, when she had gained sixteen pounds in weight and was free from all symptoms.

These cases are sufficient to represent the influence of intestinal toxemia in exophthalmic goiter, especially case 4, in which treatment under me was identical with former unsuccessful treatment she had received, excepting that I resorted to measures to overcome the intestinal toxemia, with prompt relief of symptoms.

It is not my purpose to discuss other diseases of the thyroid gland, but it is well to bear in mind that hypofunction of the gland gives rise to definite symptoms climaxing in well defined myxoedema with the cardinal symptoms of this disease. Many cases of lethargy, dull mentality, swelling of the hands and susceptibility to cold may have a poorly functioning thyroid as a background, detected promptly by a determination of the basal metabolic rate and the symptoms promptly relieved by the administration of thyroid gland or thyroxin.

In closing I wish to report an interesting observation on a recent case of exophthalmic goiter.

A young man 28 years of age with severe thyrotoxicosis was kept in bed at the Baptist Hospital and given 25 drops of Lugol's solution three times a day in an effort to prepare him for lobectomy. His urine did not react to iodine and there was no improvement until the dose of Lugol's solution was increased to 40 drops three times a day, when lobectomy was performed by Dr. Allen with complete relief of all symptoms. Three months after operation and complete recovery he was given 5 drops of Lugol's solution at 8 A. M.; urine examined at noon was negative for iodine. He was then given 10 drops of Lugol's solution and the urine examined at 2 P. M. when it was found to contain iodine.

Certainly in this case, while the thyroid gland was hyperfunctioning, he had not excreted iodine in the urine when taking large amounts by mouth and the question that presents itself is,—Was this iodine utilized

to neutralize some toxic substance circulating in large amounts and hence not excreted by the kidneys? Many surgeons fear to give iodine in sufficiently large doses and examination of the urine for the presence of metallic iodine will promptly denote whether or not it is in excess or insufficient, and should be a guide to the administration of iodine in cases of exophthalmic goiter.

SUMMARY

1. Clinical experience of the author suggests that there may be a close relationship between intestinal toxemia and hyperthyroidism.
2. Attention is called to the indol radical in thyroxin, and a possible clue to the stimulation of the thyroid gland by absorption of indol from the intestinal canal over the power of the liver to detoxicate it, may be found in such.
3. Cases are reported in which the influence of intestinal toxemia on the symptoms of exophthalmic goiter is manifest.
4. Examination of the urine for the presence of metallic iodine in cases of exophthalmic goiter being treated with iodine may assist in determining the dose of iodine.

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DISCUSSION

Dr. Mahorner: Dr. Eustis's paper brings up the interesting question of the etiology and some specific mode of therapy in exophthalmic goiter. As you saw on that slide he presented, there are

various theories of the cause of exophthalmic goiter, but no one has had sufficient experimental and clinical evidence advanced in its favor to prove it definitely or even to make it more than a possibility. Marine, in his work on fish, showed that he could produce goiter by diet. Iodine is not the only factor. It was shown experimentally that a diet deficient in iodine with high calcium content at the same time will produce goiter, but if there is low calcium and low iodine content, there will not be goiter. Apparently there again is a factor that has to do with the calcium in the soil. It is true that in many regions in which goiter is found the water is hard.

Webster, Marine, and Cipra showed that they could produce goiter with diets in which there was apparently some substance of goiterogenous nature.

All these experiments relate entirely to the colloid or adenomatous type simply an increase in size and an increase in the colloid in the vesicles, not typical exophthalmic goiter, because therein we have a disappearance of the colloid. So far as I know, there is no instance of typical exophthalmic goiter in animals. Sheep and dogs have goiter. The sheep of Montana are especially noted for goiter, but they are all big, nodular goiters. In that type, as well as in exophthalmic goiter, there is less iodine per gram of tissue than in the normal gland.

We do not know what the factor is that produces goiter, but, if we could find this, we would certainly be nearer to a cure or specific remedy for the disease. McCarrison suggested that intestinal putrefaction had something to do with it or infection through the gastro-intestinal tract. He worked in India and found that people living downstream had more goiter than those living upstream. I do not think his work has ever been repeated elsewhere, but it certainly should be because there is possibly some truth in the theory he advanced. He brought men into these districts and by giving them water he thought contaminated, he was able to produce goiter. Upon taking them out again, the goiter disappeared, but here again he was dealing apparently with big, nodular, and colloid goiters and not typical exophthalmic goiters.

As regards iodine in the treatment of goiter, it has been definitely shown clinically by a number of men throughout the country and admitted by Marine, who is one of the leaders in the thought on the etiology and therapy of goiter, that iodine administered over a long period of time to patients with exophthalmic goiter would make them iodine-fast. These patients assimilate iodine in such a way that eventually it loses some of its effect on them. A patient who will respond to iodine when it is first administered will eventually not respond

as rapidly or markedly as he did in the first instance.

I think that this is a very interesting problem and that somewhere—here, where we see relatively few goiters, or perhaps better in districts where there are many goiters the possibility of some factor coming from the gastro-intestinal tract should be studied with the idea of finding some specific cure for the disease.

Dr. Lemann: I would like to ask if the absence of iodine from the urine in Dr. Eustis's case might not be interpreted as a failure of the kidney to excrete iodine. Excretion of iodine is a test for kidney function, and the failure of iodine to appear might be an indication of a bad kidney.

I wish to ask, too, whether the diarrhea in Dr. Simon's case might not be explained as a disturbance of the sympathetic nervous system. This is one of the cardinal symptoms of toxic goiter.

I, too, have had the experience of seeing the symptoms of exophthalmic goiter regress under the influence of iodine. I have also the fear that Dr. Mahorner has expressed as the prevailing attitude of the surgeon, namely, that my patient might become iodine-fast. Personally, I would feel now that I would prefer to use iodine only temporarily as a preparation for operation, much as I think it is illogical to operate upon and cut down parts of the gland that is trying to do the best it can. Experimental and clinical work has shown that, where goiters are operated upon and large parts are removed, there is an attempt on the part of the thyroid to regenerate. It seems to me that eventually, we shall be able to attack the goiter in a much more logical way than by trying to cut part of it away.

Of course, it is a very difficult matter clinically to recognize the distinction between exophthalmic goiter and toxic adenomas. Indeed, very often, as Dr. Eustis has said, when we get to the operating room, thinking we are going to operate upon an exophthalmic goiter, when the tissue is removed, we find embedded in the typical exophthalmic goiter tissue a beautiful nodule.

Dr. Eustis: I am very much gratified by the discussion this has brought forth. It is of interest to note, taking up the discussion in *seriatum*, that Dr. Mahorner spoke of Marine's experiments on the fish in which he showed that iodine prevented the development of goiter. It is also of interest to note that the fish in the first tank did not develop goiter. The incidence of goiter was in direct proportion to the contamination of the tanks, and in the lower tanks especially, if scum formed on the bottom, a larger percentage of the fish developed goiter. The fish were relieved of goiter by removing them to clean water, irrespective of

iodine—certainly an evidence of the effect of putrefactive material.

It is also worthy of note that goiter is quite frequent in rats kept in experimental laboratories. I have been recently interested in experiments carried on by Mayerson, of Tulane, in which he noted the effect thyroid had on avitaminosis anemia. One can produce goiter in white rats by keeping them on a diet exclusively of Klim. If the cages are clean they do not develop goiter as quickly as if the cages are dirty. Dr. Mahorner mentioned that there are so-called goiterogenic diets, which is likewise interesting. Webster has found that a diet of cabbage, exclusively, produces goiter in the rabbit. Cabbage is a great producer of indol, and in my diets prescribed for treatment of intestinal toxemia in patients, cabbage is prohibited. I have found, clinically, that it is necessary to prohibit cabbage to keep the patient indican free. I am not aware that any analysis of cabbage has been carried on in regard to its tryptophan content, but it is one of the greatest factors in producing indicanuria. Dr. Mahorner also spoke of these experimental goiters being colloid in type. It must not be forgotten that colloid goiter signifies previous hyperplasia, and the exophthalmic goiter is simply the entire gland which has run away with itself, so to speak.

In response to Dr. Simon's question as to what became of the iodine in the case I mentioned, it is of moment to recall that McCullough showed that in exophthalmic goiter, the percentage of metallic iodine in the blood is markedly lower than in the normal individual, while organic iodine, which he believes is due to the fusion of iodine with globulin—called by him iodothyroglobulin—and which he believes is the active hormone of the thyroid gland rather than thyroxin, is noticeably increased in hyperthyroidism or exophthalmic goiter. Plummer believes that, in exophthalmic goiter there is definite poison formed on account of the thyroid not being able to form thyroxin, forming instead an intermediate product which is toxic. This substance, he thinks, is neutralized by iodine. This is purely theoretical, but I believe the failure of iodine excretion in my case can be explained by the fact that iodine either acts to neutralize the theoretic toxic substances of Plummer, or to unite with globulin to form iodothyroglobulin of McCullough. That iodine did not appear in the urine on account of failure of the kidneys, as suggested by Dr. Lemann, was evidently not the case since there was no disturbance of kidney function. I do not mean to imply, as Dr. Simon intimated, that indican is the cause of goiter, because we know that indican represents detoxicated indol. However, I would again call attention to the fact that patients dying with exophthalmic goiter almost uniformly

show marked parenchymatous degeneration of the liver, and in many instances, fatty degeneration has been noted even so severe as that seen in phosphorus poisoning. Whether or not the same substance that disturbs thyroid function also damages liver function is a question to be proven. The damaged liver allows indol to pass through unchanged, and whether or not that stimulates the thyroid gland to overaction is a problem to be solved later.

I have answered Dr. Lemann regarding retention of iodine by damaged kidneys. He also spoke about the diarrheal symptoms and called attention to the fact that it is a prominent symptom in exophthalmic goiter. That has been a prominent symptom since the days of Graves. In the cases which I have observed, I have classified it as an eliminative diarrhea. The diarrhea is paroxysmal; the stools are always highly offensive and the urine shows intense indican reaction. I do not believe it is due to hyperthyroid disease, because many cases of severe thyrotoxicosis have no diarrhea whatever. I am inclined to think it an eliminative putrefactive diarrhea, associated with hyperthyroidism.

I do not want to be understood as suggesting that iodine with diet is a cure for exophthalmic goiter, for we must look upon iodine as a means of preparing patients for surgical intervention. An important point in bringing out the examination of the urine, is, that the surgeon is afraid of giving too much iodine on account of the idea of the patient's becoming iodine-fast, but the urine will be an index as to whether or not the patient is getting sufficient iodine.

RESECTION OF THE CERVICAL PORTION OF THE ESOPHAGUS AND THE LARYNX FOR CARCINOMA; REPORT OF A CASE*

HOWARD R. MAHORNER, M. D.

NEW ORLEANS

A man, aged 65 years, admitted to Charity Hospital September 30, 1932, gave a history of having difficulty in swallowing for two months. At first the dysphagia related only to solid food. His trouble became progressively worse until on admission there was almost complete obstruction, even to the passage of liquids. He had lost much strength and about 30 pounds in

*From the Departments of Surgery, Tulane University School of Medicine and Charity Hospital, New Orleans, La.

weight. His symptoms were of a high type of obstruction: he did not swallow and regurgitate, but could not swallow.

The physical examination, except for emaciation and weakness, was negative. Roentgen ray examination of the esophagus showed a high obstructive lesion and the roentgenologist reported that there were villous projections into the lumen suggestive of a neoplasm. Esophagoscopy examination disclosed a large mass obstructing the upper end of the esophagus. A piece of tissue was removed for examination. The pathologic report was carcinoma.



Fig. 1. Patient after the first stage of the operation. Larynx, trachea and esophagus exteriorized.

On October 5, 1932, a gastrostomy was performed. Since then the patient has been fed through the gastrostomy tube. On October 21, the patient was laryngoscoped again to determine the exact position of the growth. At that time a neoplasm was found arising from the extreme upper end of the esophagus. Besides obstructing the lumen it involved the arytenoid cartilages and there was also some ulceration of the piriform sinuses. It was impossible to determine just how far down the esophagus the neoplasm extended. A roentgenogram of the chest was negative and there were no palpable nodes or other evidences of metastases.

It seemed necessary, with involvement of the arytenoids, that if anything radical were to be

done, it would have to be removal of the larynx and esophagus. The patient was miserable. The esophagus was already obstructed, the larynx was involved, and with further progress of the growth a tracheotomy would have become necessary. Therefore it seemed justifiable to give the patient a chance of complete recovery by attempting to remove the growth entirely.



Fig. 2 Appearance two and one-half months after removal of larynx, portion of trachea and cervical esophagus, for carcinoma involving the esophagus and larynx.

On October 22, a preliminary operation was done, making an H incision with the transverse bar of the H in the middle. The thyroid cartilages, the isthmus of the thyroid and the trachea were exposed. A tracheotomy was done because even at this stage of the operation, as planned, the recurrent laryngeal nerves were exposed to injury. The isthmus of the thyroid was then divided and the thyroid lobes were dissected away from the trachea and the esophagus, and, proceeding on the inside of the great vessels of the neck, the trachea and esophagus, the larynx and the lower portion of the pharynx were entirely freed from contiguous structures, so that it was possible to pass the fingers posterior to the esophagus and lower part of the pharynx. The flaps of skin were then turned in on each side mesial to the thyroid lobes and great vessels of the neck and lateral to the larynx and esophagus. Thus the larynx, the cervical portion of trachea and esophagus, and the lower end of the pharynx were exteriorized.

One week later, October 29, 1932, the larynx, the lower end of the pharynx, a part of the trachea, and the cervical portion of the esophagus were excised. At this time it was discovered that, unfortunately, "seeding" of the growth had occurred in the upper end of the thoracic esophagus. Subsequently radium was applied to control this.

The operations were done under intratracheal anesthesia. During the first part of the first operation the usual inhalation method was used. A tube was inserted into the trachea immediately at the time the tracheotomy was done, and the anesthetic administered through this tube. The anesthetic for the second operation was administered through a tube in the trachea.

There were no complications from either operation. The patient was up on the fifth postoperative day. He has regained his strength and walks about, comfortable and apparently happy. Figure 2 shows a picture of him on January 16, 1933. The skin has almost completely bridged the gutter left by the removal of the structures mentioned.

The third stage of the procedure planned originally is to reconstruct a new esophagus. This will be possible technically. At first it seemed that a pedicle tube flap would have to be turned into the gutter but it appears feasible to simply approximate the margins of the skin at the anterior edge of the gutter and posterior to the trachea at the lower end. However, such a reconstruction is not warranted until sufficient length of time has elapsed to be reasonably sure that the "seeding" in the upper end of the thoracic esophagus has been controlled. The lower end of the pharynx is now healed over (January 30, 1933) and no secretion passes into the neck. It is peculiar that, though this patient's mouth remains moist, he is not troubled with having to expectorate his salivary secretions. There is apparently, from non-use, a marked diminution in the flow of saliva.

FRACTURES OF THE MANDIBLE AND THEIR TREATMENT*

J. P. WAHL, D. D. S.

NEW ORLEANS

Since the advent of the automobile and the increasing number of cars each year on the streets; the great speed at which these cars are driven; and the advantage some of these drivers take of the laxity in the enforcement of the eighteenth amendment, accidents are more prevalent now than they were in former years. As a result of this increase in accidents, a great many more fractures of the mandible occur now than in former years.

Fractures of the mandible that follow automobile accidents are usually more severe than those produced by other accidents, due to the tremendous trauma produced by the automobile. These fractures are usually of the comminuted, compound type with subsequent sepsis.

The mandible, owing to its position, acts as a kind of guard to the rest of the face and is more exposed to violence than any other bone of the face, but owing to its loose connection with the skull, is less liable to be complicated by skull or brain injury, than a fracture of the maxilla.

Our present day accessibility to the use of the roentgen ray makes the diagnosis of fractures of the mandible very simple.

In making a diagnosis and before resorting to treatment, we must consider three essential factors; (1) the amount of displacement; (2) the type, whether simple or compound etc.; and (3) the condition, whether clean or septic.

The symptoms of a fracture of the mandible are; displacement, which is due to the muscular pull; loss of function; edema; pain and crepitation.

The treatment of fractures of the mandible may be divided into: (1) the treatment for the relief of the septic condition and the pain; (2) the treatment necessary for the proper fixation after the reduction of the fracture.

In this paper I will discuss, first, the treat-

*Read before the Orleans Parish Medical Society, November 28, 1932.



CASE No. 1

Double fracture of the mandible. Notice the downward and backward displacement caused by the pull of the muscles attached to the fragment and the hyoid bone.

ment for the proper fixation after reduction of the fracture.

There are various methods that have been devised, from time to time, for reducing fractures of the mandible, such as interdental splints, intermaxillary wiring, bandaging and surgical wiring of the fragments. In all of my thirty years of practice, I have only had two occasions where I was compelled to use the surgical wiring method.

Before any of these methods can be used satisfactorily a complete study must be made of the displacement, which displacement is always maintained or modified by the action of the muscles which are attached to the mandible.

The action of the muscles on an intact mandible are very nicely balanced but when a fracture occurs, the action of certain muscles are no longer equally balanced and displacement is produced. When a fracture occurs vertically at the symphysis the muscular balance is very little, if at all, disturbed and in a great many cases a fracture in this location is very hard to diagnose without the roentgenogram, as there may not be any displacement.

In fractures of the body of the mandible between the symphysis and the angle, the smaller fragment will be drawn toward the median line by the action of the portion of the mylohyoid muscle which is attached to that part, while the whole of the mylohyoid muscle of the opposite side, together with the muscles attached to the symphysis will draw the mental portion of the fragment backward.

If the mandible is fractured on both sides,

the mental fragment might be pulled backward, while the direction of the line of fracture might be such as to prevent displacement entirely. I recall a case that was referred to me a few years ago, of a man who had been injured in a fight and the physician who had examined him sent him to me for me to wire his loose anterior teeth, when upon closer examination I found just such a fracture as the one spoken of above.

In fractures of the angle of the mandible, the body of the bone is usually drawn backward, this is due to the fact that the muscles which are attached to the inner surface of the mandible have a lower plane of attachment at the hyoid bone, this causes the direction of pull to be downward as well as backward.

In the normal mandible the temporals, masseters and the internal pterygoids neutralize the downward pull of the muscles attached to the hyoid bone, but when a fracture occurs between the angle and the symphysis, the fragment, unless prevented by the line of fracture, is drawn downward and backward, and in selecting a splint one must be selected which will prevent this displacement, to be satisfactory.

The study of anatomy teaches us that the muscles of mastication are attached to the ramus of the mandible and its processes.

The masseters, the temporals and the internal pterygoids enable us to close our mouth, while the digastric muscles, geniohyoids and the mylohyoids enable us to open our mouths.

The displacement of a fragment in this location depends on the amount of attachment these muscles still have to the fragment. The mas-



CASE No. 2

Fracture of the mandible anterior to the third molar. An ideal case for intermaxillary wiring.



CASE No. 3

Double fracture of the mandible complicated by a third molar lodged between the fragments.

setter being the most powerful, might in cases of fracture in front of the angle, cause an outward tilting of the ramus. In cases where the fracture is in the upper third of the ramus there is as a result very little displacement.

Because of the tooth sockets the mandible is more often fractured in the body of the bone than in the ramus and principally so about the cusped tooth, since this is usually the longest rooted tooth and naturally the location of the longest socket and the weakest portion.

In fractures of the body of the bone where a number of teeth are present, the diagnosis is usually very simple as displacement in the normal occlusion usually occurs but fractures behind the angle and up on the ramus are best diagnosed by the roentgenogram. The seat of fracture can usually be diagnosed by localized points of tenderness along the body of the mandible.

In fracture at the symphysis there might not be any displacement but pressure exerted on the jaws at the angles will cause discomfort and pain at the chin, owing to the force transmitted through the bone to the sight of fracture.

If a fracture is near or above the angle, it is best determined by a backward pushing on the chin and drawing it from side to side.

TREATMENT

The treatment of a fracture of the mandible, involves two objects, namely, the care of the tissues and the replacement and maintenance of a correct position of the parts. The latter is accomplished by holding the broken fragments

in their proper relation to the sound jaw with bandages and thus indirectly with each other, or by means of dental splints, intermaxillary wiring or surgical wiring.

Indirect fixation can only be used where there is a full or nearly full set of teeth in the uninjured jaw as well as the fractured jaw, and is usually or wholly employed by the physician.

This method is to bandage the lower jaw to the upper with a four tail or a Barton bandage, but as this bandage presses backward on the chin it only tends to bring about displacement and thereby causes disfigurement.

The direct fixation is best accomplished by the use of dental splints or intermaxillary wiring. Various splints and appliances have been constructed to hold the broken parts of the jaw in position. Many of them which have been devised from time to time have borne the names of the men who devised them such as the Hammond, Gunning, Matas, Moriarty, and Kingsley splints. Most of these splints were made with extraoral attachments for holding them in position and they undoubtedly served their purpose, but they were cumbersome and unsightly. This form of splint has almost entirely been replaced by the swaged or cast metal splint, which after being constructed, is cemented on the teeth and which holds the parts firmly in position without any external appliance, headgear, or bandage.

As the dental splint must be constructed by one having a knowledge of dental mechanics,



CASE No. 4

Incorrect intermaxillary wiring of simple fracture of the mandible showing poor approximation of the fragments.

and as the physician is not taught this technic in his regular curriculum at college, if he wishes to use this method, he must necessarily call upon the dentist to assist him.

Every case of fracture of the mandible is an individual case and must be handled as such. No definite rule can be set down for the type of splint to be used. Success depends very largely upon the common sense of the doctor and the co-operation of the patient.



CASE No. 5

Proper wiring of case number five showing almost perfect approximation of the fragments.

The technic used to construct a dental splint is as follows:

As I stated before the essential factor to be considered in constructing a splint is to construct one that will overcome the muscle pull. The first step is to get a good impression of the parts. This can be accomplished by using either modeling compound or plaster of paris. I prefer the modeling compound as I can use it with more comfort to my patient and with greater ease to myself than I can plaster and if used carefully one can get a very sharp impression. In some cases this impression can be taken as a whole, as in a simple fracture, but in cases where there is much displacement, it is necessary to take an impression of the parts separately. We then take a good impression of the upper jaw. After the models are run, if taken as a whole, the cast of the lower is sawed in two on a line with the fracture. The teeth of these two parts are then carefully occluded with those of the upper model and the parts are cemented or waxed together.

In occluding the parts great care must be

exercised as the slightest difference in the occlusion will cause a failure of perfect adaptation which would result in the fragments not being held squarely together, thereby resulting in an undue pressure being brought to bear upon them at one point, while at another they will not touch; at the point of too great pressure inflammation will set in and death of the bone might follow. Union in such cases might take place but if it did there would be a faulty occlusion.

The model after being cut and assembled, represents the jaw previous to the fracture.

A wax model is then made of the kind of splint that you think will best suit the case, which may be constructed in either one or two parts. The wax model is then removed from the plaster cast invested in any of the standard investment materials and duplicated in metal by the casting method and finished according to routine, or dies may be made and splint swaged in metal.

If the splint is made in two parts, some sort of locking device must be used so that, after the splint is cemented into position and the displaced fragments brought into alignment, it may be locked into position.

Intermaxillary wiring could be very easily mastered by the physician and in a great many cases would serve the purpose very nicely. At any rate he would get very much better results than he could ever expect to get with the indirect method. The secret of proper intermaxillary wiring is not just being in a position to twist a few wires around a few upper and lower teeth and then twisting the ends of these wires together, but by one having a clear knowledge of the correct muscle pull to be able to place these wires in a position so that when they are laced together they will overcome this muscle pull and keep the fragments in their correct position and thereby keep or restore the occlusion as it was before the accident.

There is one thing we must bear in mind regarding intermaxillary wiring and that is this, in using this method we wire the upper and the lower jaws together in order to keep the relation of one jaw to the other as nearly perfect as possible, in other words, we have fixed the jaws or made them immovable, this fixed position prevents the patient from controlling de-

glutition properly. If such a patient should become nauseated, they might choke to death before the wires could be cut loose, on account of their inability to free themselves of the vomitus or saliva.

In the early part of the world war this method was used quite a bit as an emergency treatment but as a consequence several soldiers, while being transported from the battle front to the base hospital, lost their lives and as a result an army order was issued prohibiting this form of emergency treatment in cases of fractures of the jaws.

In intermaxillary wiring it is impossible to keep the mouth as clean as where the dental splint is used. Another bad feature is that the wires stretch and thereby allow the fragments to move, this retards the healing. If the wires are not placed carefully about the teeth and a sufficient number of teeth are included in the field that is wired, the teeth will get loose due to the strain that is put on them. In intermaxillary wiring you will always find extensive gingival irritation.

Up to now we have been dealing with fractures of the mandible in which some teeth remained in the fragments and which teeth permitted an easy application of the dental splint or wiring, but now we will take up the reduction of fractures of the edentulous mandible, which is quite a different proposition.

Up until a short while back the easiest and best method was the direct bone wiring. Where this method was employed, the following technic was used. An incision was made on the external surface under the lower border of the jaw and after tying off any necessary vessels, a deep retraction was made on either side of the mandible, great care being taken so as not to enter the oral cavity as this would invite sepsis and prevent union. Four holes were then drilled into the body of the mandible, two on either side of the fracture, one above the other and the parts brought together by cross wiring with silver or platinum wire.

Dr. Leslie M. Fitzgerald of Dubuque, Iowa, has recently demonstrated a technic for reducing fractures of edentulous mandibles, which he claims is very much simpler than the above technic and just as effective.



CASE No. 6

Compound, comminuted fracture of the mandible, gun shot wound. Mandibular splint in place.

Dr. Fitzgerald's technic is as follows: The patient's lower denture, or a vulcanite splint, is used to cover the ridge of the mandible. A small incision is made through the skin at the lower border of one of the fragments and a small curved cannula and trocar are passed through this incision close to the bone on the lingual side of the mandible until the mucous membrane of the mouth is reached and pierced. The trocar is then removed and one end of a sixteen gauge silver wire is threaded through the cannula from below. The cannula is then withdrawn and then the cannula and trocar is passed downward from within the mouth close to the bone on the labial, emerging at the original opening on the lower border of the fragment. The trocar is then removed and the other end of the wire is threaded up through the cannula and the cannula is removed. Now the wire has been passed around the bone and the ends are then twisted over the denture or vulcanite splint so that the bone fragment is drawn up snugly in contact with the splint. Another wire is similarly passed around the other fragment and twisted over the splint.

This circumferential wiring is well tolerated and may be left in place until union takes place. The wire may be removed by cutting the twisted ends and pulled out from above.

As these patients usually already have dentures makes this method very simple to employ.

TREATMENT FOR THE RELIEF OF SEPSIS
AND PAIN

Fractures of the mandible that occur as a result of automobile accidents are usually of the comminuted compound type, meaning as stated in the beginning of this paper, a break in the tissue or one in which the fracture communicates with the oral cavity, and the bone is splintered.

Fractures of the ramus are rarely of the open type.

Whether or not an open fracture of the mandible will become infected depends largely upon the amount of injury to the coverings of the bone, the amount of separation and the condition of the patient's mouth at the time of the accident.

In a fracture of the mandible where there is distinct separation and splintering of the fragments, I have found it very beneficial to bring about drainage externally by inserting a small drain through a stab wound that will communicate with the break, made under the jaw or chin. If suppuration does not occur the wound will heal without leaving a scar, if suppuration does occur, the bone and soft tissues will be saved.

The patient's mouth should be given the best of care during the treatment of an open fracture. There must be a very thorough and frequent cleansing and irrigation. I have found the use of metaphen or aromatic sodium perborate to be very satisfactory, if used every hour.

In all cases of sepsis the patient should be seen daily and if the stab wound method has been employed with an iodoform drain, this should be changed at each visit.

An ice cap applied over the site of fracture so as to cool and not freeze will limit the inflammatory process and relieve pain; anodynes may be necessary.

Fragments of bone should not be removed until they have been completely detached.

We should always try to preserve the teeth unless they absolutely interfere with the approximation of the fragments.

The time for union of course depends largely on the character of the fracture, the number of fractures and the reparative effort of the individual.



CASE No. 7
Deformity resulting from the use of a barton bandage to reduce a fracture of the mandible. Notice the separation of the upper and lower teeth.

In single fractures, where there is little or no suppuration it usually requires three weeks for union, where bone is lost or badly shattered, as in gunshot wounds, it will take anywhere from three weeks to six months. One case I had under treatment, in which the bone was very badly shattered, took six months for complete union.

In double fractures it is always a safe procedure to allow the splint to remain at least five or six weeks, as there is more tendency to displacement and a greater firmness is necessary before the splints can be dispensed with.

Delayed union may be brought about by poor approximation of the parts or by lack of stability, or by local infection or by some fault in the vital reparative supply.

Syphilis, tuberculosis, pregnancy or any general depression might cause delayed union.

All ununited fractures, fractures where fibrous union is evident and in cases of non union, result generally from sepsis and interproximating sequestra of bone. I believe that infection plays a greater part in preventing union of bone fragments than any other factor. If non union is the result of loss of a large amount of bone tissue with a resultant gap or to the fact that destruction of callus formation has taken place, with a fibrous tissue between the fractured parts as a result. To overcome this condition, if the gap is not too large, the fibrous tissue can be removed, the edges of the bone freshened and a new process of osteogenesis stimulated.

In closing I would say that I believe that

better results could be obtained if there was a closer co-operation between the physician and the dentist while handling these cases.

DISCUSSION

Dr. H. B. Gessner: For a number of years, I have been convinced that it is important to have dentists associated in the treatment of fractures of the jaws. I have tried to impress on medical students that, if they get a fracture of the jaw to treat, they should try to get a dentist to help. The dentist has a special knowledge of occlusion and of technics in the mouth, which makes him useful and superior in taking care of fractures of this kind.

It has been a source of pleasure, in my association with the dental profession, to see the development of dentistry along medical lines. Dentists take care of fractures of the jaw in an exceptional manner. They have conquered the technic of regional anesthesia to our satisfaction, and along other lines they have developed. Their best men in the country have done valuable research work in those diseases which threaten the loss of teeth, like Riggs' disease, and threaten general health. We owe a great debt to the dentists for the advances they have made in preventing and relieving pain and infections about the teeth and gums, and, of course, in restorative work which preserves our good looks and possibly adds to it. The dentist has an important function in the early recognition of cancer. Dr. Bloodgood, who will speak here on December 19, is very much interested in the cooperation of the dentist; in fact, he has urgently requested that the dental profession be invited and that they be very active in taking part in the proceedings.

I think we all ought to work for closer relations between the general medical profession and the dental profession. One way in which that can be accomplished is through the education of the dentist. In the past, the dentist had a smattering of the pre-clinical branches. Today, in the best schools, the dentists has two years of pre-clinical work in contact with medical students. They work shoulder to shoulder in going through the preliminary studies. I hope in the course of time this will become the general thing and that the progress of the dentist, through his later studies, will be such as to permit of general medical and general surgical training at the same time. Of course, some branches would be useless to a dental student. Obstetrics, repair of the accidents of childbirth, and some other branches are not essential for the dental student to study with the medical student. But, along the general lines of medicine and surgery, the dentist should be well prepared before he goes out to practice, so that he will serve even more usefully than he does at present.

THE MODERN TREATMENT OF ASTHMA*

B. G. EFRON, M. D.†

NEW ORLEANS

The treatment of asthma has undergone a radical change in the past two decades. The recognition that asthma is a local manifestation of a constitutional state, and that this constitutional state is anaphylactoid in character, has resulted in the use of specific measures instead of numerous and often futile procedures.

DIAGNOSIS AND DIFFERENTIAL DIAGNOSIS

As a rule, there is little difficulty in the diagnosis of bronchial asthma. Difficulty in the differential diagnosis is most often experienced in children and in adults past the third decade. Paroxysmal dyspnea, or wheezy respirations, accompanied by the presence of numerous sonorous and sibilant rales generalized throughout the chest with a prolongation of the expiratory phase of the respiration, are characteristic of the condition. In adults, the conditions most frequently confused with asthma are chronic bronchitis, bronchiectasis, tuberculosis, mediastinal neoplasms, hysteria, aortic aneurysm and cardiac asthma.

In children, the diagnosis of asthma is at times quite difficult, and apt to be overlooked. This is due primarily to the fact that the adult type of attack, referred to above is only one of a variety that can occur in children. Asthma in children may be classified as follows:

1. Acute bronchitis type.
2. Hay fever type.
3. Adult type.
4. Mixed type.

1. *Acute Bronchitis Type of Asthma.* The clinical picture is similar to that of bronchitis or pneumonia. Fever is present and may be quite high. Rales of all types are present. The course may be typical of bronchitis or bronchopneumonia but very often symptoms may be of a violent character, but with an abrupt and quite dramatic recovery. It is not unusual to see a

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child apparently gravely ill in the morning, practically symptom free by afternoon. The attacks are recurrent, and time and again a diagnosis is made of bronchitis or pneumonia, several times in one winter. This type of attack is frequent in young children.

2. *Hay Fever Type.* The clinical picture is that of a head cold, sneezing, itching nose, watery discharge accompanied by a rasping cough, with or without wheezing and choking. The attack usually occurs late at night or during the early morning hours. A child who goes to sleep feeling perfectly well, will awaken during the late hours of the night sneezing, coughing and perhaps wheezing. The attack will last from half an hour to several hours, and is usually over by mid morning. This type is also recurrent and may recur from nightly to weekly or biweekly intervals. This type of asthma occurs in very young and older children.

3. *Adult Type.* This type of asthma occurs usually in older children and supervenes very often after the patient has had either or both of the other types of asthma for some time. Fever may be present. This type, is of course recurrent.

4. *Mixed Type.* The same child may have one type of attack one time, and another type the next time.

Asthma in children must be differentiated from croup, diphtheria, enlarged bronchial lymph glands, acute bronchitis, pneumonia, thymic asthma, congenital stridor, laryngismus stridulus, retropharyngeal abscess and others.

ALLERGIC DIAGNOSIS

When a diagnosis of asthma is established, it becomes necessary to determine the causal agent or agents responsible for the attacks so that rational and often specific treatment may be instituted. The constitutional state of which asthma is a manifestation has been named the allergic state. Allergy may be defined as a changed reaction capacity of the individual, so that substances, that are harmless to the great majority of the race, become harmful to him. It is the search for these substances that constitutes the basis of allergic diagnosis.

History. The history is by far the most important procedure in the search for the causal

agents. It must be in the nature of a careful cross examination. No fact pertaining to the case can be overlooked and quite frequently an apparently insignificant observation leads to the establishment of an etiologic diagnosis. The time of the onset of symptoms, the course of the disease, and influence of previous operations, and therapy, the time of onset of individual attacks, the frequency of attacks, the relation of attacks, to fans, dusts, occupation, powders, odors, perfume, smoke, crowds, head colds, hay fever, pets, drugs, locality, change of locality, season, changes of temperature, humidity, all is very important information in the evaluation of the possible causes in each case. The type of mattress, bed covers, pillows, floor covers, house furniture, used by the patient should also be known; as well as the plants, flowers, shrubbery and animals about the residence.

Etiologic clues are disclosed by a careful history. Asthma occurring only in summer is usually caused by pollens and seasonable foods. Asthma in winter is often due to tree pollen and house dust. The patient who sneezes, or has hay fever or choking when a room is being swept, is most likely sensitive to dust in the house. The woman who has asthma after a dry shampoo or a visit to the beauty parlor is sensitive to orris root. Attacks that occur soon after meals are often due to specific foods.

An individual may have asthma in one house and not in another; in such an instance a careful check of the differences in the environment of the two houses will lead to a definite clue. Dust cases often become symptom free on transfer to a hospital. Pollen sensitive asthmatics often are relieved by a change of climate, they are particularly symptom free on the high seas and usually are much improved at the sea shore.

Very often a visit to the patient's home discloses etiologic factors. Multiple sensitivity is the rule, so that the history can never be too minute or painstaking.

Physical Examination. The physical examination is important but is usually of secondary significance. In most cases few etiologic factors are discovered. Possible foci of infection

are disclosed. Foci of infection should be eliminated, but with conservatism as a keynote.

Skin Tests. Skin testing is used to aid in the determination of the causal agents. Its wide applicability has led to a realization of its limitations. Like all other laboratory procedures skin testing is subject to marked limitations. The skin reaction is a fortunate though by no means constant local manifestation of allergy; and disregard of its limitations has resulted in much misunderstanding concerning its value, misconception ranging from the expectation that its use will yield an absolute etiologic diagnosis to total lack of usefulness. When properly done and when a sufficient number of allergens pertaining to the case are used, and properly interpreted, skin tests are a valuable adjunct in arriving at an etiologic diagnosis. Skin reactions must be interpreted and correlated with the clinical history and the therapeutic response.

Laboratory Procedures. Other laboratory procedures, such as blood counts, blood chemistry, kidney function tests, and roentgenograms may be indicated in certain cases. They should be used in cases of asthma as in other conditions.

TREATMENT

The treatment of asthma is based on the determination of the causes of the attacks in the individual case. Absolute individualization is essential. Perennial asthma indicates a constant association with responsible antigens. Seasonal attacks are usually due to grass and ragweed pollens, if in summer, and dusts and tree pollens if in winter. Occasional attacks suggest unusual contacts or unusual foods. All types of cases may be complicated by foods, animal emanations, and odors. Food cases may occur occasionally, seasonally or perennially; depending on the degree of food sensitivity and on the foods to which the individual is sensitive. It is absolutely necessary for the physician to know the principal trees and weeds, as well as their pollinating dates, growing in his locality.

Dust and pollen cases should be treated by avoidance and hyposensitization.

In perennial inhalent cases, different antigens, given in *seriatum* may be necessary. Hyposen-

sitization should be carried on over a long period of time.

Food sensitivity should be treated by avoidance and in only very unusual instances should hyposensitization be tried with food allergens. When diet avoidance arranged according to the reactions obtained by skin tests fails to produce therapeutic benefit, the elimination diets of Rowe, modified according to Vaughn's biologic food groups, should be used. Very often, allergens, otherwise undetectable, are discovered by the use of elimination diets. Ketogenic diets are of value only in so far as they eliminate foods that are allergenic. The same can be said for low protein diets. In all instances, it is necessary that the patient receive a balanced dietary.

Drugs require but brief mention. The iodides are useful in some cases. Belladonna is of little value; ephedrine may check mild attacks only. In all cases, drug idiosyncrasies must be watched for. Drug idiosyncrasies are not uncommon in asthmatics and more harm than good may result from the indiscriminate prescribing of drugs.

Vaccine therapy undoubtedly has some place in the treatment of asthma. There is no doubt that bacterial sensitization occurs, but our knowledge of bacterial sensitivity in so far as it pertains to asthma is quite inadequate. Fortunately we see only a small number of cases in this part of the country that are possibly sensitive to bacteria. Whether the therapeutic results obtained with vaccines are due to specific or non specific desensitization is still a question. Results with vaccine, at least in my hands, have been inferior to those obtained with other allergens.

SUMMARY

The cooperation of physician and patient is essential in order to obtain therapeutic results. Patients experience so many disappointments that they are eventually quite unwilling to make a serious effort which requires time, patience and sacrifice. This is regrettable, for few illnesses require more time and diligent effort than does asthma. Unfortunately many physicians are similarly minded, and unless allergy offers an immediate simple cure of an otherwise intractable condition, dismiss it as un-

worthy of consideration and investigation. It is essential that the physician be cognizant of, and the patient be informed at the commencement of treatment, that prolonged observation, testing and retesting, clinical trial, desensitization over a long period of time, are usually required; that recurrence may occur after relief and search for the causes of the recurrences rather than abandonment of the line of treatment are in order.

CONCLUSIONS

1. Asthma is a local manifestation of a constitutional state, that is anaphalactoid in character.

2. Asthma occurs in children in types other than that seen in adults.

3. Allergic diagnosis is the search for etiologic agents that are responsible for asthmatic attacks. These substances are numerous, and include foods, dusts, pollens, animal emanations, vegetables fibers.

4. The history is the most useful single procedure in the search of the causative agents.

5. Skin tests are most valuable if done correctly and interpreted in the light of the history and subsequent clinical observations.

6. Treatment is based on the etiologic factors in each case.

7. The therapeutic results obtained compare most favorably with those obtained in the treatment of other chronic diseases.

LEUKOCYTE COUNT IN RABBITS AFTER INJECTION OF AN ORGAN- ISM ISOLATED FROM A CASE OF GRANULOCYTOPENIA

WILLIAM A. SODEMAN, M. D.*

NEW ORLEANS

Because of the similarity of the clinical course of so-called primary granulocytopenia to acute infections, and since some diseases of infectious nature are known to be associated with a leukopenia, attempts have been made to show

that granulocytopenia is due to an infectious agent, or at least that an external factor, such as bacteria, may exert an influence upon susceptible individuals ^{1, 2, 3, 4}. In one experiment² cultures of *B. pyocyaneus* obtained from a clinical case produced a reduction of leukocytes in the blood of peritoneally inoculated guinea pigs. In another experiment³ failure attended attempts with the same organism in rabbits. Cultures of *Salmonella suispestifer*, an organism known to produce leukopenia, when injected into rabbits produced blood pictures which resemble markedly the blood pictures seen clinically in primary granulocytopenia⁴.

An elderly man in the Charity Hospital developed during the course of a severe granulocytopenia with angina, suppurating regional lymph glands. Aspiration of one of these, in the left submaxillary triangle, disclosed a purulent exudate containing a Gram-negative diplococcus, intracellular and chiefly extracellular, which grew in pure culture with difficulty on broth and agar, but with greater celerity on blood agar, forming in one days growth gray pin-point colonies.

Forty-eight hour cultures, suspended in physiologic saline solution were injected into the marginal ear veins of 3 months old rabbits and blood counts recorded, together with those of controls under similar conditions of living. Results on 3 such animals are recorded.

Table

Rabbit No.	303	301	306
At injection.....	8,500	7,100	7,600
2½ hr. later.....	8,100	6,200	7,700
1	10,600	10,500	9,900
2	14,300	13,800	12,000
3	16,600	.....	11,300
4	death	10,400	9,200
5 .....	.....	8,400	9,000
7 .....	.....	7,200	8,100
10 .....	.....	7,600	8,400

Amount injected=Rabbit 303—1½ cc.; rabbit 301—¾ cc.; rabbit 306—¾ cc.

Leukocyte Counts Following Injection of Culture of Organism Isolated From Lymph Gland

Results of injections showed in every animal the production of a leukocytosis together with

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an increase in the percentage of polymorphonuclear neutrophils. There is often, however, a mild drop in leukocyte count several hours following the injections, followed later by a leukocytosis. In no case, even with an injection of organisms sufficient to produce death, did a marked or persistent leukopenia occur.

These results support the supposition that organism found in lesions in the course of granulocytopenia are not the causative factor, but have probably gained admission to the tissues during the stage of reduced neutrophils and

manifest themselves when suppuration occurs with increase in neutrophils.

CONCLUSION

Evidence to support the infectious theory or proof of a specific microorganism as the cause of granulocytopenia, was not obtained.

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THE DIMINISHING MENACE OF TUBERCULOSIS:—

Eventually all must die. Here we have certainty; or as we say in more technical terms, the probability of eventually dying from **some** cause is unity. But the probability of dying from a **specified** cause is some fraction of unity, a fraction which varies from one disease to another, and which is subject to important changes with the lapse of time. We shall, in successive issues of this BULLETIN, present a series of articles setting forth these probabilities for some of the principal causes of death, and the shift—up or down, as the case may be—that has taken place within the last decade.

The case of tuberculosis is outstanding. It would be well if an equally favorable record could be shown for all the other important causes of death, but this, as we shall see later, is unfortunately not so. The accompanying tables exhibit the state of affairs with regard to tuberculosis (all forms). Among white males at birth, the probability of eventually dying from this disease was 6.46 per cent., or 64.6 per 1,000 in 1920, and fell to 50.9 per 1,000 in 1925 and to 42.5 per 1,000 in 1930. This means that, out of every thousand white males born at the present time, twenty-two escape the death from tuberculosis to which they would have been fated under conditions prevailing ten years ago. The very marked diminution which has thus occurred is perhaps more clearly brought to view when the figures are expressed in per cents of the probability of dying as of 1920. We then find as follows: writing 100 for the probability in 1920, the corresponding figures for white males in 1925 and 1930 are 78.8 and 65.8 respectively. Among white females, the probability is considerably lower throughout; so in 1920, the probability at birth is 57.7 per 1,000;

in 1925, 44.4 per 1,000; and in 1930, 35.6 per 1,000. Expressed in terms of the probability in 1920 equated to 100, these figures are 100 for 1920, 76.8 for 1925, and 61.7 for 1930.

The tables show in detail how the probability varies at different periods of life. Among white males, the probability of ultimately dying from tuberculosis rises to a maximum at age fifteen, and this maximum occurs at the same age on three dates, 1920, 1925 and 1930, as closely as can be judged from a table that gives only every fifth year of life. Among white females, the maximum probability is at ten years of age in 1920 and in 1925, and at age five in 1930, although there is very little difference between the figures at ages five and ten among white females in each of these calendar years. The question has frequently been discussed whether tuberculosis should be regarded as typically a disease of early life. A glance at the table will show that, in very recent times, this predominance of tuberculosis mortality at the younger ages is much moderated. For instance in 1930, the probability at age fifteen of ultimately dying from tuberculosis is 45.2 per 1,000 for white males and it is still a very considerable figure, namely, 25.3 per 1,000, at age fifty. The contrast was greater in 1920, where we see that, at age fifteen, the probability of ultimately dying from tuberculosis was 70.9 per 1,000, whereas at age fifty, it was 36.1 per 1,000. The situation among white females is essentially similar in this respect. Thus, in former years, tuberculosis was, in greater degree than today, a cause of death characteristic of adolescence and early adult life.

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NEW OFFICERS OF THE LOUISIANA STATE MEDICAL SOCIETY

The last official action of the House of Delegates of the Louisiana State Medical Society before adjourning after their business meeting in New Orleans was the installation of Dr. C. A. Weiss of Baton Rouge, as President of the organization. Dr. Weiss is one of the best known men in the Society. He has always been an active worker in the State Society, and he,

likewise, has been interested in his local organization, and is an active worker in both. The Journal extends its congratulations and felicitations to Dr. Weiss in being honored by being selected to head the State organization, and the State Medical Society likewise, is to be congratulated upon securing as its presiding officer a man so well qualified, so sincere, and so interested in its welfare.

The new officers that were elected include first, as President-Elect, Dr. S. Chaille Jamison of New Orleans. Dr. Jamison has been a regular attendant at the State Meetings and has appeared frequently on the programs of the Scientific Sessions. The respect of the Orleans Parish Medical Society for their former President, is evidenced by his selection as a delegate to represent his Parish Society ten times in the last eleven years. Dr. Jamison was graduated from Tulane University in 1912, and served an internship at Charity Hospital. He has successively gone through all the grades of service in this great hospital, and at the present time is a Senior Visiting Physician. He is connected also, as Senior Physician, with the Mercy Hospital and Hotel Dieu. He is a member of the American Medical and the American Climatological and Clinical Association. Ever since his graduation Dr. Jamison has taught in the Medical Schools of Tulane University, and has been one of the most popular and well-liked teachers in this institution. He occupies at the present, time, the position of Professor of Clinical Medicine. In 1924 the Orleans Parish Medical Society selected Dr. Jamison as their President, as an appreciation of the active interest shown in the organization, through service on various committees and as Librarian for five years. The House of Delegates did well in electing Dr. Jamison to occupy the presidential chair one year from this date. He is a man of force, of splendid character, and one who will labor sincerely for the Society.

Dr. J. H. Slaughter of Bogalusa, was elected the First Vice-President. Dr. Slaughter has served the State Society as Councilor for some years, and his selection to the present office indicates a real appreciation of his interest and activity in organized medicine by his fellow members of the House of Delegates.

For the position of Second Vice-President, Dr. Marcy J. Lyons of New Orleans, was selected. Dr. Lyons has held office in the Orleans Parish Medical Society, and he has served on innumerable committees, besides acting as delegate to represent the Orleans Parish Medical Society in the State Medical Society House of Delegates. He has been an active and useful member, and deserves the honor conferred upon him.

Dr. George Wright of Monroe, succeeded Dr. W. P. Butler as Third Vice-President. Dr. Wright comes of a well known medical family, and always has been an energetic and unselfish toiler for the Ouachita Parish and the Louisiana State Medical Society.

Dr. P. T. Talbot of New Orleans, held over as Secretary-Treasurer, and Dr. J. J. Ayo, of Raceland, was re-elected as Speaker of the House of Delegates. The record of both of these men has been so honorable and so efficient that it is hoped they will continue to hold their respective offices for many years.

The Councillors for the First, Second, Fourth and Fifth Districts, respectively, Dr. H. E. Bernadas, Dr. Daniel N. Silverman, Dr. W. H. Browning, and Dr. J. B. Vaughan continue in their positions as they have not finished their terms of office. In the Third District, Dr. C. C. DeGravelles of Morgan City, was re-elected. In the Sixth District, the popular Dr. Clarence A. Lorio of Baton Rouge, well known to the doctors of Baton Rouge and the State, was selected the Councilor for his District. Dr. Claude A. Martin of Welsh, another enthusiastic and well liked physician of the State, was chosen as Councilor for Seventh District. Dr. Jack T. Cappel, one of the best known physicians of Alexandria, and a man universally admired throughout the State, will become Councilor of the Eighth District for the next two years.

The list of committees that were selected will appear in the report of the House of Delegates to the State Medical Society.

MISSISSIPPI STATE MEDICAL ASSOCIATION OFFICERS

The Journal wishes to extend to the new officers of the Mississippi State Medical Association

felicitations and warm greetings. The new officers have been honored by their fellow members of the Mississippi State Medical Association but the Association has honored itself, too, in the selection of the men that they have chosen to head their organization.

Dr. J. W. D. Dicks will be the new President, having served the past year as President-Elect. To those who know Dr. Dicks, and they include most of the members of the Association, it is perfectly obvious why the honor of heading the State Society has been conferred upon him.

Dr. E. C. Parker, Gulfport, is the President-Elect, and will become President the following year. Dr. Parker has been active in the interest of the State Association for many years. He is a splendid representative of medical practitioners. No better qualified man could have been chosen than this able Gulfport surgeon. The Journal also wishes to congratulate the new Vice-Presidents, Dr. E. R. Nobles, Rosedale; Dr. J. A. K. Birch, Vicksburg, and Dr. C. C. Hightower of Hattiesburg, all men who are outstanding in their communities and in the State. The other officers, most of whom were re-elected, the Journal likewise wishes to compliment. Many of them for many years have been effective workers, conscientious in their duties and thorough in their accomplishments. The Society has done well to re-elect such men as Dr. Wilkins, Dr. Dye, Dr. Wall, Dr. Howard, and Dr. Lippincott.

MEDICINE—ORGANIZED AND DISORGANIZED

There are two contributions to the philosophy of medicine that we hope every medical man will read. The first of these, in this current number of the Journal, has to do with the importance of organized medicine and the necessity of the medical men getting together, working cohesively, and striving to put into effect the very best principles and purposes of medicine through organization. Dr. Matas has expressed so beautifully, so thoroughly, and so logically the advantage and the necessity of medical men being organized that his exposition could be used by benefit by medical societies not

only in Louisiana, but throughout the United States.

The second presentation appeared in the last weeks' edition of the Journal of the American Medical Association under the title of "Medicine at the Crossroads". Dr. Harvey Cushing, in a splendid philosophical, and at times somewhat satirical address, talks about the physician of the present day and many of his problems. Some of these are the result of the disorganization of medical practice by lay bodies. Many of them have to do with, and are dependent upon, the unselfish desire of the physician, forgetful of self, to help others.

In the last section of this address before the Congress of Physicians and Surgeons, Dr. Cushing presents an allegory in which Dame Medicine is the heroine. The poor old lady was persuaded, some five years ago, that she should submit herself to a physical examination. A group of fifty consultants were called in at the cost of several million dollars and assembled innumerable data necessary for a diagnosis of her

condition. The consultants were made up of experts and specialists of all kinds, including a sprinkling of doctors. It was decided that if she did not alter her habits and modes of life, which menace society, that she should have to have a radical operation. After the diagnosis and the advice has been given, she makes bold to suggest that the whole world seems topsyturvy at the present time, and that it might be well to let things stand as they are until people come back to rational thinking. In this charming little continued metaphor Dr. Cushing pays his respect to efforts that others have made and are making to reform us of the medical profession. Apparently he does not think that we need reform or that we will be changed, but even if this implied opinion holds true it should be reiterated and restated many times; that unless all physicians present a solid front against the efforts of others to socialize medicine; that unless we stand organized and not disorganized, the practice of medicine may be radically altered; that we believe if such should come about it would be decidedly for the worse.

HOSPITAL STAFF TRANSACTIONS

CHARITY HOSPITAL MEDICAL STAFF MEETING

The regular monthly meeting of the Medical Staff of Charity Hospital was held May 16, 1933, at 8:00 P. M., with Dr. W. A. Love presiding.

Dr. Thiberge demonstrated three cases of allergy treated with whole typhoid protein. Dr. Shushan discussed this presentation.

Dr. Granger showed several roentgenograms which he discussed, illustrating the plan of reporting roentgenograms in his department. Dr. Durel discussed this subject.

Dr. Unsworth showed a neurological case which he thought was an atypical case of syringomyelia. This case was discussed by Drs. Freiman and Connell.

The next order of the meeting was the presentation of interesting autopsy material by Dr. Connell. These were (1) a tumor thrombus originating in the liver and extending up into the right auricle; (2) auto-digestion of the stomach; (3) bilateral hypernephroma; (4) coronary thrombosis with beginning aneurysm of the heart; (5) luetic cirrhosis in a child four months of age.

Willard R. Wirth, M. D.

TOURO INFIRMARY MEDICAL STAFF MEETING

On May 10, 1933, at 8:00 P. M. Dr. Reed presided at the regular clinical meeting of the Touro Staff, in the absence of Dr. Lemann.

Dr. Randolph Lyons discussed two unusual cases of hyperthyroidism. This presentation was discussed by Drs. Pitkin, Holbrook, and Eshleman.

Two cases of inverted uterus were discussed by Dr. Walter Levy. Dr. Matas added to the discussion.

Dr. Kaplan gave a demonstration of the thermocouple and its value in the diagnosis of vascular diseases. This was discussed by Drs. Polmer, Matas, Bloch, and Rives.

Willard R. Wirth, M. D.

HOTEL DIEU

The regular monthly meeting of Hotel Dieu Staff was held April 17, 1933 at 8 P. M. with Dr. P. L. Thibaut, President, in the Chair, and Dr. D. V. Longo, Acting-Secretary, at the desk.

Dr. Edward McComac presented a case as follows: It is a case of bilateral polycystic kidney occurring in a well nourished male, fifty-six years of age. The chief complaint was acute pain in the left loin resembling a kidney colic. The urine analysis showed an occasional red blood cell, and

no pus or organisms. This picture is compatible with that of ureteral stone. X-ray pictures were negative for stones in the genito-urinary tract. Phenolsulphonephthalein, done three times, averaged 28 per cent. Cystoscopy was carried out. Left ureter was catheterized to the kidney pelvis; no obstruction; no stasis; specimen showed moderate numbers of red blood cells, no pus, no organisms. There was no stasis on the right side; specimen showed a few red blood cells, no pus, no organisms.

(X-ray pictures were shown. The first was a plain KUB which was negative for stone formation. The second, after injecting the left pelvis, showed a pyelogram which was suggestive of a hypernephroma. A third picture was another pyelogram of the left kidney showing an outline of the kidney pelvis which was typical of a polycystic kidney. A fourth was a pyelogram of the right kidney pelvis, which showed also a typical polycystic condition of the kidney.)

A segregated phenolsulphonephthalein showed only a faint trace of the dye coming through from the left kidney in thirty minutes. There was an output of 15 per cent from the right kidney in thirty minutes. It is interesting to note that the dye appeared from the right kidney in four and a half minutes, which is normal. I was unable to record accurately the appearance time from the left side. This shows definitely that when kidney tissue is not diseased the phenolsulphonephthalein has an appearance time which is normal, and the amount of dye secreted is in direct proportion to the amount of normal kidney tissue present.

There are three types of kidneys which demonstrate this condition very clearly:

a. Infantile kidneys. Provided the kidney tissue is not diseased, the phenolsulphonephthalein will appear normally but will be reduced in amount in direct ratio to the size of the kidney and the amount of kidney tissue present. Of course, the total fluid output will be reduced.

b. Cases of healed pyelo-nephritis. If there has been a marked inflammatory process with round-cell infiltration the ultimate result is a deposition of scar tissue throughout the kidney. If the process heals, and the healing may be occasioned, for instance, by the removal of the cause, the resultant kidney will in some respects resemble an infantile kidney. The resemblance lies in the fact that part of its kidney tissue will be thrown out of function by the scar tissue, but if the healing is complete the remaining kidney tissue is normal. Therefore, again we see a normal appearance time with a decrease in kidney function in proportion to the existing normal kidney tissue.

c. Polycystic kidneys. The case I showed demonstrated that kidney destruction is caused by the cysts producing pressure on the kidney tissue and resulting in atrophy, partial or complete, with

or without infection. If the atrophy is without infection, then the remaining kidney tissue, or that portion which is not atrophied from pressure, should be normal, and again the appearance time is normal with a decrease as in the infantile kidney and kidney with the healed pyelo-nephritis. In the patient referred to, neither kidney was infected; the left had no function, and the right had still apparently a good percentage of working tissue.

I will grant that infection takes place in polycystic kidneys before death in 80 per cent of instances. In the earlier cases, in my opinion, the infection is much less. In the case just shown, no operative procedure is indicated. The patient should be advised as to his general health, hygiene, et cetera; and the probability is that his normal life will be shortened very little, if at all, by his diseased kidney condition.

Dr. Lucien Fortier demonstrated and explained the X-ray pictures in this case.

Dr. R. L. Gordon: The age (56) of Dr. McCormac's patient is above the average. Polycystic kidney age is generally in the forties. Brasch found the average to be 46. In bilateral polycystic kidneys, nothing can be done. Only in the case of severe hemorrhage from one side (when nothing else can be done) should operation be undertaken.

One point of differential diagnosis between hypernephroma and polycystic kidneys is this: On the X-ray film, in polycystic kidneys, there is slight cupping of the minor calices, whereas there is no cupping in malignancy.

Dr. Louis Levy reported a case of total polycystic kidneys, in which repeated P.S.P. tests showed nothing. When this happened, death is certain. The kidneys became the size of a baby's head, the patient gradually went down, with no hope of any kind.

Dr. J. A. Danna showed a patient who had, after the death of her husband two years ago, been quite upset, and shortly afterward began to vomit. She lived through two years of continuous vomiting; every known remedy was tried to stop it without success. X-ray pictures showed, on one occasion, normal filling of the stomach, duodenum and upper end of jejunum, and a stasis in the upper portion of the jejunum. Another time the Roentgenologist decided she had a duodenal ulcer.

After nine months of futile treatment, an exploratory operation was done; this revealed what looked like a cicatricial area in the duodenum beyond the pylorus. Three weeks after the operation, vomiting began again. Medications included belladonna, opiates, bromides, nitroglycerine, pituitrin, calcium intravenously and by mouth.

Two months ago it was decided to try insulin, which has recently become popular for treating acidosis and also emaciation. Since the patient had a certain degree of both, insulin was begun, and with the first dose she stopped vomiting; it

has not recurred. Patient has gained over twenty pounds.

Dr. M. Couret inquired if pyloric spasms could have been the contributing cause of this vomiting, since this picture is found in newborns who have pyloric spasms. Dr. Danna replied that none of the X-rays could be interpreted as such; the barium meal went through without difficulty. All methods of treating spasm were tried without result until insulin was used.

Dr. C. G. Cole presented a case of Hemorrhagic Pancreatitis, as follows:

The patient came to us complaining of nausea and vomiting, with severe pain in the upper abdomen. Some of the laboratory findings were:

Urine. (2-1) Heavy trace of albumin and of sugar.

Blood: 1-31 2-2

Total white cell: 20,250, 35,750.

Neutrophils: 95, 97.

Non protein nitrogen: 45.0 mg. per 100 c.c blood.

Urea Nitrogen: 22.5 mg. per 100 c.c. blood.

Creatinine: 2.1 mg. per 100 c.c. blood.

Sugar: 166.0 mg. per 100 c.c. blood.

X-ray of abdomen for obstruction: No evidence of dilated loops of intestines seen; marked hypertrophic changes in lumbar spine.

We diagnosed an acute surgical abdomen and suggested operation; Dr. Danna concurred in this opinion. The family however, objected strenuously to surgery, and Dr. Levin was called in. He made a diagnosis of acute cholecystitis, and thought medical treatment advisable. This line of treatment was instituted.

The patient's condition, however, in my opinion, remained stationary for the following thirty-six hours, and from this time on seemed to lose ground; on the last twenty-four hours of treatment, a decided change for the worse was in evidence. Symptoms continued with greater intensity, and the patient expired on 2-5-33.

Dr. M. Couret: At autopsy there was found, around the pancreas, a necrotic mass, suggesting carcinoma, and there was marked autolysis of the surrounding fat tissue of the omentum and mesentery. In the region of the pancreas there were occasional large nodes, which afterwards turned out to be inflammatory in character.

Demonstration of gross specimens and microscopic slides followed.

Dr. J. A. Danna: I saw this patient, very sick, with severe abdominal pain which could not be definitely blamed on any one organ so far as outward signs were concerned. My impression was of some unusual condition; I thought of retrocecal appendix, which gives general symptoms and not localized ones. I also thought of mesenteric throm-

bosis. There was no evidence to single out any upper pathology.

In an acute abdominal condition which is not improving, we should go into the abdomen always. Occasionally we may find no pathology, but in the long run, we will make less mistakes by operating every time.

Dr. L. Levy: Dr. Wallie Richards, in an article written seventeen years ago, reported over twenty cases in which he drained the gall bladder for acute pancreatitis, with excellent results. I have made use of this method, with some success. I favor cholecystectomy whenever possible; but in the majority of cases, gall bladder drainage is indicated rather than cholecystectomy.

FRENCH HOSPITAL

A regular monthly meeting of the Staff was called to order by the Chairman on April 14, 1933.

The first paper on the program was "Agranulocytic Angina," presented by Dr. Charles L. Cox. This is a disease of the granulopoietic system and is comparatively rare, there being only 150 cases reported in the literature. The diagnosis is arrived at by the definite blood picture, ulcerative patches in the mouth and fever; 80 per cent of cases are found in middle aged women. Practically all cases are fatal. Agranulocytic angina is toxic paralysis of the granulopoietic system. The etiological factor is not known.

Dr. Cox presented a case in which the patient, a white female had weakness, high fever, sore throat, herpetic vesicles on the lip. The left tonsil and posterior pharynx showed a grayish membrane. It was believed to be diphtheria and therefore antitoxin given. However the blood count showed 8 per cent polys. and a diagnosis of agranulocytic angina made.

The paper was opened to general discussion. Dr. Menville strongly advised irradiation in small doses over the long bones which is stimulating to the increased production of leukocytes in the blood. Dr. Baron reported a case he had this winter at French Hospital who was treated with blood transfusions and X-ray over the long bones. She was clinically well two weeks after treatment was begun and the last blood count showed 60 per cent leucocytes and 8,000 white cells. Dr. Harris and Dr. Silvermann are both of the opinion that agranulocytic angina is more frequent than is believed, either all cases are not reported or they are not recognized as such.

Dr. Loria then spoke on the "Treatment of Lung Abscess". The etiological factor may be: 1. Aspiration of foreign bodies, tonsillectomy, swallowing tooth; 2. Pneumonia; 3. Embolic usually—a peripherally located abscess; 4. Subphrenic abscess—amebic in character; 5. Empyema; 6. Trauma to the chest; 7. Specific infection such as

actinomyces, echinococcus amebic or tuberculous.

The symptomatology is a persistent cough, non-productive at first which later becomes productive. Thirty per cent to 40 per cent of cases have a very foul odor. There are signs of toxemia and late in the course of the disease there is clubbing of fingers.

The blood picture shows a decrease in red blood cells, a white blood cell count of about 30,000. X-ray and fluoroscopic are exceedingly important as these are the only means of verifying the diagnosis and locating the abscess.

Ten to 15 per cent of cases are cured clinically with medical treatment such as posture, internal medications, rest in bed.

Surgical procedure depends upon the location of the abscess: I. A centrally located abscess and one communicating with a bronchus the method of choice is artificial pneumothorax providing there are no adhesions present. Or aspiration with a bronchoscope and the introduction of phenol and oil directly into the abscess cavity.

2. The above surgical treatment does no good for a peripherally located abscess. Open drainage is the procedure of choice.

3. Occasionally one finds the interlobar type and if this is not cured medically then surgery is resorted to either by aspiration with the needle or by open drainage. One should be particularly cautious for if the material is virulent you may produce an empyema.

Dr. Loria presented several cases and the results obtained on film slides. The paper was opened to discussion. Dr. Menville stressed the importance of the x-ray in diagnosis of lung abscess. Cavitation and fluid level are necessary to call it a lung abscess.

The reports of discharges and deaths for the previous month were then read. A case of cerebral abscess, five years after a gunshot wound of the chest, with lung abscess and empyema was discussed by Drs. Cazenavette, Alsobrook, Harris.

The chairman announced that the last meeting of the year would be held May 12.

N. J. Tessitore, M. D.,
Secretary.

ANNUAL MEETING OF THE STAFF OF THE MISSISSIPPI BAPTIST HOSPITAL

The staff met in the dining room of the hospital and had a very fine meal served and enjoyed by all. There were twenty-nine members and two visitors present. The superintendent made a short talk on the present situation and quite to the point.

Dr. W. H. Henderson, formerly of this staff and recently the roentgenologist for Touro Infirmary of New Orleans, has been recently elected to the staff in the same capacity here. It is with a great deal of pride and satisfaction that this staff is

capable of retaining a man of the caliber of Dr. Henderson and we feel that this community is indeed fortunate that we are able to have him work with us here. At the present time the writer is informed that he is installing himself in his newly acquired home on North State Street. We feel that this is but part evidence that Jackson is fast becoming one of the leading medical centers.

Case report by V. D. Hagaman:

This case was one of a colored female who had sustained a case of pansinusitis over some several years and had had the frontal sinuses opened some several times by the external route and at the present time shows a sequestrum in the region of the frontal sinus. A bilateral radical maxillary antrum operation was done (Caldwell-Luc operation) and much diseased tissue removed. This was followed subsequently by an opening of the diseased frontal sinuses and sequestrectomy and packing with the establishment of drainage thru the nose as well. The patient was shown. The case was discussed by Dr. Robin Harris.

Case Report of J. F. Armstrong:

This case was one of a 22 year old white female, married, who came in with a pain in the right breast and thought that she had a tumor and after examination was told that there was nothing present but returned in one week and was worse. A roentgenogram of the chest was made and there was found a drainage tube under the right breast about two inches long. After a history was gone into it was found that she had been operated upon for empyema thirteen years ago. Operation was done under either and a two rib flap was turned down and the tube found embedded in the lung tissue with pus around the same. After a stormy convalescence the patient recovered and is now doing well.

Dr. L. B. Neal was present at the staff meeting after a long convalescence and was welcomed back by all.

Dr. J. P. Wall reported a case of a 14 year old female child who had been menstruating for seven weeks with pain in the left lower quadrant after exercise with a globular mass in the left fornix on examination and at operation a cystic ovary the size of a hen's egg was found and removed.

Drs. Hall and Noblin made some remarks concerning the coming meeting of the State Association.

A motion was made and passed by Dr. Harris for the president to appoint a committee to look into the matter of selection of courtesy members to the staff. McDill, Harris and Armstrong were appointed.

Dr. Underwood made a talk concerning the amount of indigent work being done by the profession.

Dr. Harris made a motion which was passed that

a member proposed be on probation one year and that they be a member of a medical society at the time of election, regardless of whether the proposed member has been practicing in the vicinity longer than one year.

It was brought to the attention of the staff that no notification of the meetings has been reaching the associate members of the staff.

This being the annual meeting, the election of officers was in order and was proceeded with in the usual manner and the following men were elected for one year: Dr. F. L. Van Alstine, president; Dr. W. B. Dobson, vice-president; Dr. L. W. Long, secretary.

L. W. Long,
Secretary.

VICKSBURG SANITARIUM STAFF MEETING

The regular monthly meeting of the Staff of the Vicksburg Sanitarium was held on May 12. After the usual business, the following special case reports were presented:

1. Automobile Injury—Fracture of Pelvis, Rupture of Bladder, Intraperitoneal Abscess and Intestinal Obstruction; Operation with Resection of Small Intestine; Recovery.—Dr. A. Street.
2. Herpes Zoster with Coexisting Appendicitis in a Diabetic.—Dr. J. A. W. Birchett, Jr.
3. Infantile Paralysis with Coexisting Retroperitoneal Sarcoma in an Eight Months Old Infant.—Dr. G. C. Jarratt.

Three minute reports of the literature of the month were given as follows:

1. Dr. A. Street.—Strangulated Femoral Hernia.
2. Dr. R. A. Street, Jr.—Pelvic Measurements.
3. Dr. L. S. Lippincott.—Disease Rates in New York.

The following selected radiographic studies were shown and discussed: (1) Lung Abscess (2 cases); (2) Ureteral Calculus with Hydronephrosis and Hydroureter; (3) Carcinoma of the Kidney; (4) Carcinoma of the Sigmoid.

The next meeting of the staff will be held on Monday, June 12, at 6:30 P. M.

Leon S. Lippincott,
Secretary.

ABSTRACT: HERPES ZOSTER WITH COEXISTING APPENDICITIS IN A DIABETIC.—Dr. J. A. K. Birchett, Jr.

PATIENT.—White male, aged 65 years, salesman, admitted to hospital April 11, 1933.

CHIEF COMPLAINT.—Pain in abdomen.

HISTORY OF PRESENT COMPLAINT.—At bedtime last night was seized with severe cramping pain in pit of stomach with some nausea but did not vomit, got up and took large dose of magnesia which gave some relief, still evidence of pain and uneasy feeling in abdomen when he got up this

morning. Had two bowel movements and felt better though he had pain in right side of abdomen which did not cause him any uneasiness as he is suffering at this time with shingles along the lower costal margin of right thorax. Herpes developed 24 hours ago after having caused much pain and the pain in the side of the abdomen was thought to be of the same source. He left home for his business after eating a light breakfast, but about 9:30 the pain in right side of abdomen became so severe that he found it necessary to return home in a taxi. On arrival home he immediately called his family physician.

PAST HISTORY.—General health good, never had any serious illness. Several years ago developed diabetes for which family physician has been caring and he has never had any marked disturbance from it, no loss of weight, no headaches, no ulcerative developments. No myocardial or respiratory disturbances, no nocturia and no renal disturbance of note.

FAMILY HISTORY.—Father died at age of 38 of yellow fever; mother died at age of 88, senility; one brother at age of 62, pneumonia, and one sister at age 42, unknown. No tuberculosis or cancer.

PHYSICAL EXAMINATION.—Well developed and nourished white male of past middle age apparently suffering with pain, which he pointed out was located in abdomen. Mouth dry, tongue coated, teeth out. Abdominal muscles rigid; pain elicited over McBurney point and over right lower quadrant. The pain was aggravated by sudden release of pressure on abdomen over appendix. The thorax showed several grape-like clusters of a vesicular eruption which were characteristic lesions of herpes zoster over the surface of lower right costal margin. Heart rate 88, rhythm normal, no murmurs, lungs negative. Prostatic examination not done, external genitals negative. **LABORATORY EXAMINATION.**—Blood: Total leukocyte count 10,800; small lymphocytes 13; large lymphocytes 3; neutrophils, mature, 54; immature 28. eosinophils 2. Urine: Specific Gravity 1.040, marked acetone, sugar 4, no albumin, rare pus cells. **DIAGNOSIS:** Appendicitis, acute; herpes zoster, diabetes mellitus. **TREATMENT:** Operation was performed immediately after admission and approximately 16 hours after onset of attack, under either anaesthesia. A gangrenous appendix was located retroceally. There was purulent exudate in the abdominal cavity and for this reason drainage was instituted. **SUBSEQUENT:** Recovery was rapid considering the complication of diabetes with evidence of acidosis at times. The blood sugar at one time was as high as 307 mg. per 100 cc.

COMMENT.—We consider this case unusual because it was complicated by the neurological disturbance, herpes zoster, the pain of which was so

similar to the pain which later developed because of the appendical condition that patient did not think that he had any new disturbance and for that reason neglected it longer than a pain of similar severity would have been otherwise neglected.

The literature shows that herpes zoster is seen as a complication of many diseases—Hodgkin's disease, lymphosarcoma and leukemia, in arsenic poisoning and following facial neuritis with paralysis and optic nerve disturbances. Barney in the New England Journal cites a case in which herpes was diagnosed as a renal stone. Nowhere in the literature have I encountered the association of

acute appendicitis and herpes zoster, hence the interest in presenting this case.

This case well demonstrates the great value of insulin in surgery in diabetes mellitis. Not many years ago an operation such as was performed as an emergency with no preparation would very probably have been followed by severe asidosis and perhaps death. The treatment of this patient, including post operative care and convalescence, was varied not at all from that given to any patient without diabetes, with the exception that insulin was used to balance the carbohydrate intake. He was discharged on a diabetic diet without insulin.

TRANSACTIONS OF ORLEANS PARISH MEDICAL SOCIETY

CALENDAR

June 2—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

June 2—Physiology Seminar, Tulane Medical School, 5 P. M.

June 5—Eye, Ear, Nose and Throat Hospital Staff, 8 P. M.

June 7—Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

June 9—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

June 9—French Hospital Staff, 8 P. M.

June 12—ORLEANS PARISH MEDICAL SOCIETY, 8 P. M.

June 14—Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

June 14—Touro Infirmary Staff, 8 P. M.

June 15—Eye, Ear, Nose and Throat Club, 8 P. M.

June 15—New Orleans Hospital Council, French Hospital, 8 P. M.

June 16—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

June 16—I. C. R. R. Hospital Staff, 12 Noon.

June 16—French Hospital Staff, 8 P. M.

June 19—Hotel Dieu Staff, 8 P. M.

June 20—Charity Hospital Medical Staff.

June 21—Clinico-Pathological Conference Touro Infirmary, 10:30 to 11:30 A. M.

June 21—Charity Hospital Surgical Staff.

June 23—Clinico-Pathological Conference Hotel Dieu, 11 A. M. to 12 Noon.

June 26—ORLEANS PARISH MEDICAL SOCIETY, Clinical Meeting at the United States Marine Hospital, 8 P. M.

June 27—Baptist Hospital Staff, 8 P. M.

June 28—Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

June 30—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

During the month of May, besides the regular meeting of the Board of Directors, the Society held two regular scientific meetings.

At the meeting of May 8 the following program was presented:

The Schilling Hemogram in Pediatrics. Lantern Slides.

By: Dr. Harris Hosen. Discussed by Dr. Chas. J. Bloom.

Midwifery Customs in India Which Favor Tetanus and Pressure Gangrene of Mother; and Decomposition of the Unborn with Case Reports.

By: Dr. H. W. Knight.

Muscular Dystrophy with Clinical Results Following Oral Administration of a New Form of Therapy.

By: Carlo J. Tripoli, M. D., and Howard H. Beard, Ph.D.

The following resolutions from the Jefferson County Medical Society of Birmingham, Alabama, were presented:

The Committee on the Cost of Medical Care has made its final reports. Although this Committee had no official status either with the national government or with the American Medical Association, the high standing and wide prominence of its members gives great weight to its pronouncements.

In the general state of finance, most if not all physicians are very seriously affected. With incomes greatly reduced, and in some instances almost completely destroyed, we are inclined to accept any suggestion which seem to offer even temporary help over the crisis. This fact seems to magnify the importance of suggestions coming from prominent sources.

Revolutionary changes in our code of ethics as well as in our state constitution would be necessary before the recommendations contained in the majority report of the Committee could be put into effect. The minority report charges that the

majority reached their conclusions on insufficient and unsatisfactory evidence.

That the report of the Committee has caused some discussion locally is shown by the fact that at least one unofficial meeting has been held here recently for the purpose of considering opinions on its recommendations.

At the next meeting of the American Medical Association to be held in Milwaukee in June 1933, the recommendations of the majority and minority reports will be discussed and some action taken.

In view of the facts therefore be it

Resolved, 1st. That the Jefferson County Medical Society endorses the Principal Minority Report of the Committee on the Cost of Medical Care. The recommendations are as follows: (Opposite Page 151, Medical Care for the American People.)

(1) The minority recommends that government competition in the practice of medicine be discontinued and that its activities be restricted (a) to the care of the indigent and of these people with diseases which can be cared for only in government institutions; (b) to the promotion of public health; (c) to the support of the medical departments of the Army and Navy, Coast and Geodetic Survey, and other government services which cannot, because of their nature or location, be served by the general medical profession; and (d) to the care of veterans suffering from bona fide service-connected disabilities and diseases, except in the case of tuberculosis and nervous and mental diseases.

2) The minority recommends that government care of the indigent be expanded with the ultimate object of relieving the medical profession of this burden.

(3) The minority joins with the Committee in recommending that the study, evaluation and co-ordination of medical services be considered important functions for every state and local community, that agencies be formed to exercise these functions, and that the coordination of urban with rural services receive special attention.

(4) The minority recommends that united attempts be made to restore the general practitioner to the central place in medical practice.

(5) The minority recommends that the corporate practice of medicine, financed through intermediary agencies, be vigorously and persistently opposed as being economically wasteful, inimical to a continued and sustained high quality of medical care, or unfair exploitation of the medical profession.

(6) The minority recommends that methods be given careful trial which can rightfully be fitted into our present institutions and agencies without interfering with the fundamentals of medical practice.

(7) The minority recommends the development by state or county societies of plans for medical care.

Resolved, 2nd. That the Jefferson County Medical Society point out to its members that no changes have been made recently in its code of ethics or its constitution and by-laws.

Resolved 3rd. That this Society recommend to its members that no new or revolutionary departures from our present forms of practice be considered.

A special committee of three was appointed by the President of the Orleans Parish Medical Society to consider these resolutions and reported back to the Society at the meeting of May 22.

At the meeting held May 22 the following program was presented:

SYMPOSIUM ON SYPHILIS

Dr. John Signorelli—Treatment of Syphilis in Children.

Dr. H. W. E. Walther—Therapy of Primary Syphilis with Special Reference to Bismuth Arsphenamine Sulphonate (Bismarsen).

Dr. O. W. Bethea—Treatment of Visceral Syphilis: The Use of Bismuth.

Dr. Frederick L. Fenno—Treatment of Neurosyphilis.

There was no discussion of these papers.

The report of the Committee appointed to consider the resolutions adopted by the Jefferson County Medical Society was read and adopted.

The special committee to correlate the recommendations of the committees appointed to study the various phases of abuse has met several times the month and will soon have their report ready to present to the Society.

We regret to report the loss by death of two of our active members, Drs. W. T. Browne and H. Dickson Bruns.

At the recent meeting of the American Congress of Physicians and Surgeons held at Washington, D. C., the following men from New Orleans attended: Drs. C. C. Bass, Urban Maes, C. Jeff Miller, Hilliard E. Miller, Alton Ochsner and Roy H. Turner.

The following doctors from New Orleans attended the meeting of the American Gastro-Enterological Association also held in Washington: Drs. A. L. Levin, Daniel N. Silverman and Sidney K. Simon.

Dr. Isidore Cohn was appointed Professor of Surgery and Head of the Department of Surgery of the Graduate School of Medicine, Tulane University, to succeed Dr. A. C. King.

Dr. Amos Graves has been granted a leave of absence for two years from the Department of Surgery of Tulane University. During this time he will be in the Department of Neuro-Surgery of Washington University at St. Louis as an assistant to Dr. Ernest Sachs.

Dr. Conrad Collins and Dr. Robert Robinson were elected to Active Membership.

TREASURER'S REPORT

ACTUAL BOOK BALANCE: 3/30/33.....	\$2,716.50
Receipts during April.....	1,069.29
TOTAL RECEIPTS.....	\$3,785.79
Expenditures	\$2,591.93
ACTUAL BOOK BALANCE: 4/30/33.....	\$1,193.86

LIBRARIAN'S REPORT

One hundred and one volumes have been added to the Library during April. Of these 18 were received from the New Orleans Medical and Surgical Journal, 61 by gift, 5 by purchase, and 17 by binding. A notation of new titles of recent date is given below.

In addition to everyday calls for particular titles and for material which could be furnished at once, references have been collected on the following subjects:

- Pneumothorax treatment of lobar pneumonia.
- Medical and surgical diseases of the negro.
- Medicine as a career for women.
- History of orthopedics.
- Number of women and men physicians in the United States.
- Pemberton's classification of arthritis.
- Primary carcinoma of gallbladder.
- Locate picture of heart in a certain given position.
- Elephantiasis.
- Sarcoma of antrum.
- Thymus disease in children.
- Steinach's work on rejuvenation.
- Lemon juice in the correction of achlorhydria.
- Use of true and synthetic salicylates in rheumatic fever.
- Etiology of lung abscess.
- Congenital dislocation of hip.
- Sympathalgia.
- Use of iodized oil in sinus roentgenography.
- Climacteric hypertension.
- Acute hemorrhagic pancreatitis.
- Mirror writing.
- Polycystic kidney.
- What Louisiana doctors have done in medicine.

- Phlegmasia alba dolens.
- Hypertension.
- Xanthoma.
- Work of Pal on papaverine.

NEW BOOKS

- Engelbach—Endocrine Medicine. Index volume. 1932.
- American Surgical Association—Transactions. v. 50. 1932.
- Western Branch Society—American Urological Association—Transactions. v. 1. 1932.
- Fuchs, H. E.—Diseases of the Eye. 1933.
- Morse, M. G.—Medical Secretary. 1933.
- Compton, Piers—Genius of Louis Pasteur. 1932.
- Cantrarrow, Abraham—Calcium Metabolism and Calcium Therapy. 1933.
- Sister Alma—Textbook of materia medica and therapeutics. 1933.
- Goldberg, Benjamin—Procedures of Tuberculosis Control. 1933.
- Matsner, E. M.—Technique of Contraception. 1933.
- Mazer, Charles—Clinical Endocrinology of the Female. 1932.
- Massachusetts Medical Society—Catalog of Honorary, and Past and Present Fellows. 1781-193. 1933.
- U. S. Pharmacopoeial Convention—Color Names in U. S. Pharmacopoeia. 1920-30.
- Cornell Univ.—Publications of the Departments of Pathology and Bacteriology. 1927-29.
- Hoskins, R. G.—Tides of Life. 1933.
- Oxford Surgery. v. 3 pt. 4. 1933.
- American Hospital Association—Transactions. v. 24. 1922.
- Medical Association of the State of Alabama—Transactions. v. 57-58. 1924-25.
- American Laryngological, Rhinological and Otolological Society—Transactions v. 38. 1932.
- Harvey Lectures. 1931-32.
- International Congress on Military Medicine and Pharmacy. 1933.
- Pardee, H. E. B.—Clinical Aspects of the Electrocardiograph. 1933.
- Feinberg, S. M.—Asthma, Hay Fever and Related Disorders. 1933.
- Pusey—History of Dermatology. 1933.
- Rahn—Physiology of Bacteria. 1932.
- Stockard—Physical Basis of Personality. 1931.
- Wyatt—Chronic Arthritis and Fibrositis. 1933.
- Schultz—Possibilities and Need for Development of Legal Medicine in the U. S. 1932.
- Newman—Recent Advances in Medical Education in England. 1923.
- Kellogg—Duodenum. 1933.
- Frederick L. Fenno, M. D.,
Secretary.

LOUISIANA STATE MEDICAL SOCIETY NEWS

TRANSACTIONS OF THE BUSINESS MEETING
OF THE LOUISIANA STATE MEDICAL
SOCIETY

REPORT OF PRESIDENT

To the Officers and Members of the
Louisiana State Medical Society.

Gentlemen:

It was with a great deal of hesitancy and bitter disappointment that I found it necessary to advise postponing our annual scientific session, confining our activities only to a business meeting. This decision was reached after consulting with each member of the House of Delegates, including the Executive Committee, and also the members of the medical profession of Lake Charles, where the meeting was to have been held. With only a few exceptions, it was the opinion of nearly everyone contacted that on account of the acute banking situation it was thought best to effect a postponement of the scientific meeting for this year, and that a business meeting be held in New Orleans. I am quite sure that you will all agree that recent developments confirm our judgment and vindicate our action.

ABUSE OF MEMBERS OF THE MEDICAL
PROFESSION

The past year has been a trying one for the members of the medical profession, as well as for the public at large. I have tried to interest the physicians of the State in plans that would aid us in curtailing the many medical abuses that confront us at this time. These abuses have been growing worse as the years go by, until at the present time, we are placed in a rather serious situation. It is unfair, to say the least, for a community to expect the medical profession to continue to take care of its indigents, who are in justice a charge on the community, and who are not any more the responsibility of the medical profession than that of the butchers, etc. We realize that our poor must be taken care of, and we are all willing and happy to do our share. We do reserve the right, however, to judge who we should take care of and the manner in which it should be done. Poor people need clothes, food and shelter in order to be happy and healthy, and if these necessities of life were given proper and adequate consideration by the municipal and state governments, there would probably be very little need for medical care, which is usually the result of neglect in providing the essentials of life. For this reason it seems to be the proper time for the medical profession to consider doing missionary work along this line. It is in reality no more the duty of the physician to take care of the suffering poor than that of the grocer or butcher to provide food for semi-starved people.

COMMITTEES

The abuses and irregularities against the medical profession, which in turn reflect upon the community, have been given a great deal of thought and consideration for a long time. In order that an intelligent understanding might be obtained in the manner in which these abuses and irregularities have functioned in the past, I have deemed it important to appoint a number of committees to intelligently study a plan or plans by which these abuses might be reduced or entirely eliminated. The following committees were appointed and great care and consideration was given the appointments of the members of these committees:

Committee on Pharmacy—Chairman, Dr. O. W. Bethea.

Committee on Technicians—Chairman, Dr. Ansel Caine.

Committee on Expert Testimony—Chairman, Dr. Edmund Connelly.

Committee on School Boards, Charitable Medical Institutions, and Boards of Health—Co-Chairmen, Dr. E. L. Irwin, Dr. H. W. Kostmayer.

PHARMACY COMMITTEE

The need for the appointment of a Committee on Pharmacy is because the relation of the physician and the pharmacist is similar, and the best interest of the community can be served by co-operation on the part of both physician and pharmacist. Such a committee can and will clarify existing misunderstandings that, at times, work hardships, particularly on the physician.

TECHNICIAN COMMITTEE

Technicians as technicians are a necessity, but technicians as practicing physicians are not only a menace but dangerous, and when, in violation of the law, should be prosecuted. It must be appreciated that it is a well known fact that physicians themselves, are often the greatest offenders in regard to encouraging infraction upon the Medical Practice Act. The technician, according to law, is not permitted under any circumstances, to make a diagnosis, and ever so often physicians employing technicians insist upon their violating the law by making diagnosis. This abuse should and must stop. It would be much easier and perhaps more harmonious if organized medicine would receive the co-operation of the physicians now employing technicians rather than making it necessary for prosecution of violations of the Medical Practice Act. I believe that when the matter is properly brought before such physicians their sense of fairness will make them realize that it is impossible for a busy surgeon, internist, or any other busy specialist to be able to directly supervise all his pathological, radiological or physiotherapy work.

EXPERT TESTIMONY

It is not uncommon to hear members of the legal profession comment upon the medical expert, and ever so often not in a complimentary way, and in certain instances justifiably so. Too often physicians permit the court to qualify them as an expert in some field of medicine, when they are neither by experience or education capable to so qualify. Then again, it is our opinion that medical testimony given on a contingency basis is not only not in keeping with the dignity of the medical profession, but we are informed by competent authorities that the judiciary frown upon such practice.

INFRINGEMENTS UPON THE PRACTICE OF MEDICINE

School boards, boards of health, charitable medical institutions, Veterans' Bureau Hospitals, and public health units, have infringed upon the field of the practicing physicians. In certain instances this interference might be considered as resulting from an exaggerated spirit of enthusiasm, but none the less depriving legitimate, licensed practitioners of medicine of livelihood. There must be a clearer understanding of the indication and limitation of the functions of these various agencies in regard to the practice of medicine when in competition with members of the medical profession. Their methods can easily be changed, and will be changed, if the members of the Louisiana State Medical Society desire it. We have reached the stage when unnecessary soliciting of free treatments must cease and this can be accomplished by proper concentration of effort on the part of all concerned. It must be remembered that we are all taxpayers and it is hard for us to have to pay money to sources that are infringing on the practice of medicine, and also that the young graduate of the present time is confronted with much unfair competition and we owe to these young doctors, some protection.

Members of these various committees have worked hard, and their recommendations to you, gentlemen, is the result of an untiring and relentless investigation of important matters appertaining to the welfare of the society which have been given serious thought and consideration, and, I believe that it is possible for us to put into execution their recommendations, thereby helping the profession and the public. I would respectfully recommend to the House of Delegates that these various committees be made permanent and that their reports be adopted by the House of Delegates and published in the Official Journal of the Society.

LEGISLATIVE COMMITTEE

Two outstanding achievements of momentous importance occurred during the last year. One was to define osteopathy, and the other was to remove

the license tax. At the last meeting of the legislature, the Legislative Committee of the State Society, with the aid of the entire profession, along with the tremendous help of the Legislative Committee of the Orleans Parish Medical Society, the Chairman of which, Dr. C. G. Cole, was an indefatigable worker, were successful with these two measures. It is interesting to know that it was almost impossible in the past to prosecute osteopath violators of the Medical Practice Act because there was no definition of osteopathy. All remember the number of fights which the State Society waged against the unfair and unequitable license tax, usually to no avail—now that is all changed. The results obtained are just an example of what can be accomplished when we present a united front. I would recommend that the Legislative Committee of the State Society include the Presidents of all the District Medical Societies so that the profession of the State will be better informed about legislative matters, and also, we will become a strong state-wide committee.

GROUP INSURANCE

The group life insurance and the group insurance against malpractice suits are both working nicely. Both save money for our members, and I urge those who have not availed themselves of this economical insurance to investigate it and take advantage of its low rates.

HOSPITALS

The private hospitals, especially those located in New Orleans, have put into effect certain rates which they all agreed upon. This being of great interest to the profession, I would ask that the Journal obtain these rates and publish them so that the profession can be informed as to the cost of hospital care.

TRAINED NURSE CHARGES

I would also strongly advise the appointment of a committee by the incoming President with instructions to confer with the Trained Nurses Association in regard to a reduction in the charges of trained nurses, and also to help the nurses obtain cheaper board from the different hospitals. We believe this to be fair to all concerned. The physicians' fees have been reduced and we should try to obtain proportionate reductions in other costs that the patient has to pay.

PARISH AND DISTRICT MEDICAL SOCIETIES

It has been my pleasure to visit nearly all of the District Medical Societies. I was impressed with the co-operation and enthusiasm which was demonstrated at these meetings—it was really wonderful. All districts are organized and functioning. Thanks to the earnest efforts of Dr. Silverman, the Second District is organized and most active, and could well serve as an example for societies now in contemplation of organizing.

REDUCTION OF DUES

I believe that we should have a reduction in the dues of our Society. The reduction to be based on the recommendation of our Budget and Finance Committee and the Secretary-Treasurer of the Society. These men have supervised our finances for years and have been very careful in the Society's expenditures. It should be borne in mind that for the amount of dues paid to the Society each member receives much in return. During these strenuous times we should not cripple our organization—but, on the other hand, we should be in a position to protect ourselves. The dues of our Society are smaller than those of most state medical organizations, and the benefits received are much greater than most organizations.

JOURNAL

I have attended some of the meetings of the Journal Committee. Whereas the Journal has suffered from the depression, in the loss of advertisements and subscriptions, by competent and economical management by the Journal Committee, it has in my opinion, done remarkably well. We owe a vote of thanks to the Committee for their conscientious efforts and hard work.

I would ask that the House of Delegates pass a resolution condemning any breach of ethics in unnecessary personal newspaper articles and photographs appearing in the daily press.

COST OF MEDICAL CARE

The Committee on the Cost of Medical Care made their report this year. This Committee rendered a majority report that was unfair to say the least. They gave their recommendations to the public press before even giving the medical profession a chance to pass upon it—such procedure as this is inexcusable and should not be passed upon lightly. We do not need to be told by a crowd of highly salaried men how we should practice medicine and how our compensation should be paid. I would ask that we voice our objections to this report and notify the American Medical Association of our action. If the members of our Society have not read the recommendations of this Committee, I would strongly advise your doing so, as it is my humble opinion that they are very unfair—I might add that from information obtained personally, this report is universally unpopular.

UNETHICAL PRACTICE

It has come to my attention, as President of the Louisiana State Medical Society, that members of our Society have solicited medical practice on the basis of a much lower standard than is customary. While I appreciate that in such times as these physicians are called upon daily to reduce their fees to meet an emergency, but the practice of the interloper who crawls in the dark to undermine and bargain with insurance companies, etc., by offering ridiculous reduction of service fees, is a practice

that should be condemned severely, and might be considered an offense serious enough to merit expulsion from organized medicine.

PRESIDENT ELECT

It is a source of real pleasure to me to be succeeded by such a worthy physician as Dr. C. A. Weiss, of Baton Rouge. He has been informed of the activities of my administration, in regard to curtailing some, if not all of our medical abuses. In fact, he has worked with me in a most co-operative manner, and I know will continue to work for the benefit of organized medicine.

SECRETARY-TREASURER

Dr. P. T. Talbot, our Secretary-Treasurer, has worked faithfully this year—he is always willing and his counsel is very helpful. It is unnecessary to say much about him as we all know that our interest is his interest. It would be very difficult to obtain anyone with as many good qualities, and I sincerely appreciated his help.

ASSISTANT SECRETARY-TREASURER

Mrs. Mary Crossen Kagy, our efficient Assistant Secretary-Treasurer, has as usual, worked faithfully this year—she is a distinct asset to our organization, and we all owe her our appreciation. Her work at the last legislature was strenuous and most effective.

EXECUTIVE COMMITTEE

The Executive Committee has given me their utmost co-operation, and I wish to thank each one of them.

The entire medical profession this year seems to be united and working whole-heartedly together. With this wonderful spirit prevailing, we cannot help but look forward to the future as being brighter for us all.

In conclusion, I wish to thank you all for your loyalty and co-operation. If I have not accomplished anything that will be of benefit to the medical profession of Louisiana, it has been my fault, for the medical profession as a whole, have given me their undivided support.

Respectfully submitted,

Roy B. Harrison, M. D.,

President, Louisiana State Medical Society.

REPORT OF HOUSE OF DELEGATES TO THE GENERAL ASSEMBLY

Gentlemen:

The meeting of the House of Delegates of the Louisiana State Medical Society was called together at 9:30 a. m., Monday, April 24, 1933, and again on Tuesday morning, April 25, 1933, in the Green Room of the New Hutchinson Memorial Building of Tulane University, by Dr. Roy B. Harrison, President, and the gavel turned over to Dr. J. J. Ayo, Chairman of the House of Delegates, for the transaction of business.

The Committee on Credentials, composed of Dr. Marcy J. Lyons, Chairman; Dr. Emmett Irwin, and Dr. J. B. Vaughan, made their report and the roll call showed Officers and Delegates and Past Presidents who answered the roll call. On account of illness in the family, Dr. C. C. DeGravelles of Morgan City, Councilor from the Third Congressional District, and Dr. D. C. Iles, Lake Charles, Councilor of the Seventh Congressional District, were unable to attend, but sent telegrams to the House.

Dr. E. L. King, President of the Orleans Parish Medical Society, delivered the Address of Welcome.

In the absence of Dr. J. Q. Graves of Monroe, Dr. John G. Snelling of Monroe, delivered his Memorial Address for 27 deceased members who died since the last annual meeting.

The House of Delegates voted to pay for the expenses of the banquet Monday night, for members of the Society, out of the Entertainment Fund of the Society.

Dr. Roy B. Harrison, President, read his annual report, and after being referred to the Special Committee on President's Report, composed of Dr. J. E. Knighton, Chairman; Dr. C. M. Horton, and Dr. Leon J. Menville, was disposed of as follows:

"First, in regard to Medical Abuse as mentioned by the President, we heartily agree with him that there is an unusual imposition at this time upon the Medical profession, and we also agree with him that the committees which he has appointed will have occasion for much activity in regard to Medical Abuse, and for this reason we would recommend the adoption of the recommendation of the President in regard to making the following committees permanent ones: Committee on Pharmacy, Committee on Technicians, Committee on Expert Testimony, and Committee on School Boards, Charitable Medical Institutions and Boards of Health.

"Regarding the recommendation of the President in enlarging the present Public Policy and Legislative Committee to include the Presidents of the various District Medical Societies, we respectfully urge that this recommendation be adopted.

"We are in perfect agreement with the President's recommendation in regard to publishing the service fee of the New Orleans' Hospitals in our Official Journal.

"We also recommend the adoption of the recommendation of the President that a committee be appointed by the incoming President to investigate the advisability of the reduction of service charges by trained nurses, and also to look into the matter of lowering the charges for board charged to trained nurses in attendance on patients in the various hospitals.

"In regard to the recommendation of the President on the reduction of dues, we heartily agree that the time is now propitious for a reduction, and

we recommend to the House of Delegates that we adopt the recommendation of the President that a reduction of dues should be inaugurated based upon the recommendation of the Budget and Finance Committee.

"We also recommend for adoption by the House of Delegates, the recommendation made by the President in regard to our voicing our objections to the majority report of the Committee on Medical Care, and that these objections be made known to the American Medical Association.

"The President's Report also takes into consideration the matter of group insurance. We would like to call attention at this time to our membership of the excellent opportunity offered our members in regard to protection, and we urge their careful consideration of the Group Insurance now in effect by the State Society.

"Your Committee on President's Report has given careful study and consideration to the various recommendations of our President, and we wish to commend most favorably upon the excellence of this report and urge its adoption as a whole. We would be derelict in our duties did we not mention the many notable achievements which our President has performed for Organized Medicine during his tenure of office, and we wish to ask the House of Delegates that an expression of appreciation be made in behalf of the noble and notable efforts of our President."

In regard to the recommendation of publishing rates of hospitals, it was passed that these should be published once a year in the New Orleans Medical and Surgical Journal for the City of New Orleans, and if hospitals in other cities wished their rates to be published, same could be done subsequent thereto.

The House of Delegates ratified their recent vote changing the Annual Meeting from a scientific to a business one, holding meeting only for the House of Delegates.

The Secretary-Treasurer read his report, which was referred to the Special Committee of the Secretary-Treasurer's Report, Dr. J. T. Nix, Chairman; Dr. C. Grenes Cole, and Dr. King Rand. After due consideration, it was disposed of as follows:

"The Committee with Drs. Cole and Nix present, carefully reviewed the report of the Secretary-Treasurer and beg to submit the following:

"1. The report is characteristic of the usual thoroughness of the office.

"2. It shows the intense interest of this office, keeping in touch as it does with all matters of medical interest in every quarter of the State.

"3. The note of optimism that runs through the lines is highly encouraging, for we feel that this office is especially qualified to give expert testimony regarding the present status of the medical profession and its future outlook.

"4. We have no criticism but our praise, and we feel it a privilege to recommend that this report be adopted as it is presented unchanged."

The Council and the various Councilors made their reports, giving the activities and status of organization in their respective Districts. For example, there has been a re-organization of the Second Congressional District. Report was also made of the organization of a Tri-Parish Medical Society in the Fifth District, composed of the Parishes of East and West Carroll, and Madison. Dr. Browning, Councilor of the Fourth District, suggested that a Committee be appointed to report on the activities of opticians at the next meeting of the House of Delegates.

The Reports of the Committee on Scientific Work, Dr. P. T. Talbot, Chairman, the Committee on Public Policy and Legislation, Dr. C. A. Weiss, Chairman, the Committee on Medical Defense, Dr. R. O. Simmons, Chairman, the Committee on Hospitals, Dr. Chas. Chassignac, Chairman, the Committee on Public Health and Instruction, Dr. W. H. Seemann, Chairman, the Committee on the Care of the Indigent Physician, Dr. C. A. Weiss, Chairman, the Committee on Walter Reed Memorial, Dr. A. E. Fossier, Member, the Committee on Insurance, Dr. Oscar W. Bethea, Chairman, the Committee on Revision and Reprinting of the Charter, Constitution and By-Laws, Dr. W. H. Seemann, Chairman, made their various reports, which were received and filed.

The Committee on Journal, Dr. H. W. Kostmayer, Chairman, made a very interesting report, and the House of Delegates received same with special commendation for the excellent financial condition reported, and to the members of the Journal Committee for so successfully handling same.

Dr. Rudolph Matas, as Chairman of the Committee to Prepare History of the Louisiana State Medical Society, in collaboration with Dr. J. T. Nix, a member of the committee, presented a most complete report of their activities to date. This report consisted of charts, graphs, and other data, bringing out some of the features of medical organization in our State and the various Parishes in the State where there has been an increase, stationary, or decrease in membership. Photographs were exhibited of hospitals throughout the State. The committee offered these presentations as an evidence of the present status of the work of the committee up-to-date, all of which will appear in the official History of the State Society. The House of Delegates, after listening to this very interesting report, voted that it be received and filed with thanks for the Committee's exhaustive studies.

The Committee on Medical Education, Dr. Basil MacLean, Chairman, presented a very elucidating report, which after being duly considered, was disposed of as follows: Dr. Harrison, Secretary of the

State Board of Medical Examiners, explained the present arrangement in regard to the fifth or interne year which should be satisfactory, after which the report was accepted. It was recommended that the Committee on Medical Education give consideration to the feasibility of establishing a course in pharmacy in the second pre-medical and first year of medicine.

The Report of the Committee on Budget and Finance, Dr. E. L. Leckert, Chairman, was submitted and disposed of as follows: It was agreed that the State Society should not participate in the expenses the Orleans Parish Medical Society incurred during the recent meeting of the Legislature. Concerning the reduction of dues, after considerable discussion it was decided that the dues should be reduced from \$7.00 to \$6.00 per year.

The Committee on Cancer, Dr. John A. Lanford, Chairman, made its report containing the following recommendations which were adopted:

"1. That the President of the Louisiana State Medical Society urge upon the President of each component Society the holding of a special meeting on the subject of "Cancer Control", such as is suggested by the American Society for the Control of Cancer.

"2. That the program adopted at the last meeting for the education of the physician, nurses, and dentists be continued.

"3. That radio talks on cancer topics be made monthly from New Orleans, Shreveport, and Monroe. These talks will be made by some member of the profession, but the name of the doctor is not to be mentioned.

"4. That newspaper articles be published at least once a month in as many of the daily and weekly newspapers of the State as possible.

"5: That the Society authorize the Scientific Work Committee to assign at least one hour's time for a symposium on the subject of "Cancer Control" to be presented before each scientific meeting of the State Medical Society.

"6. That the articles which now appear in the New Orleans Medical and Surgical Journal in the space donated by the Louisiana State Board of Health, through the courtesy of Dr. J. A. O'Hara, be continued.

"7. That an expense account of not more than \$100.00 be budgeted for the activities of this committee during the coming year."

The Report of the Committee on Pharmacy, Dr. Oscar W. Bethea, Chairman, was read and ordered to be published in the Journal.

The report of the Committee on Expert Testimony was read by the Chairman, Dr. E. McC. Connelly. After due consideration, the first recommendation concerning the registering of physicians annually according to their specialties, was referred back to the committee for further elucidation and

study. The question of fees for expert testimony was discussed and the recommendation of the committee rejected. The rest of the report was accepted as read. The Committee was continued to take cognizance of anything further which might develop under their function.

The Committee on School Boards, Charitable Medical Institutions, and Boards of Health, was read and, after due consideration was referred back to the Committee for further study and elucidation.

The Committee on Technicians, Dr. Ansel Caine, Chairman, made their report and, after due consideration, was accepted.

The Report of the Committee to Investigate Hospital Abuse in the City of New Orleans, Dr. A. E. Fossier, Chairman, was read, and after due and lengthy consideration, was disposed of as follows: Recommendation 1, concerning the establishment of efficient social service department was adopted. Recommendation 2, that private institutions of the city establish independent ambulance service was adopted. Recommendation 3, that Charity Hospital transfer injured patients to private institutions when the patient so desires, was rejected. Recommendation 4, requesting private hospitals to organize efficient accident departments and etc., was accepted. Recommendation 5, in regard to compensation cases in Charity Hospital being unfair to doctors was accepted. Recommendation 6, that representatives of this Society should address the various component societies on hospital abuse was accepted. Recommendation 7, that Charity Hospital should not be used by politicians, was passed, with the proviso that no differentiation be made according to class. Recommendation 8, that names and addresses of inmates of hospitals be published was rejected.

There was no report submitted by the Committee on Hospital Abuse from Shreveport.

The Committee to Investigate the Feasibility of a Full Time Executive, Dr. C. Grenes Cole, Chairman, was read and accepted.

The Report of the Louisiana State Board of Medical Examiners was read by Dr. Roy B. Harrison, Secretary, and, after due consideration, the report was accepted. To conform with recommendations in this report, a special committee of five was appointed to confer with the Governor in regard to the recommendations for vacancies on the State Board of Medical Examiners and report to the next meeting of the Executive Committee, such names and recommendations which were necessary under the circumstances.

Communication was received from Mrs. Robt. Lucas, President of the Woman's Auxiliary, and the House of Delegates voted that the Chairman of the House of Delegates appoint an Advisory Committee to act with the Woman's Auxiliary as requested.

The Report of the Committee on Resolutions, Dr. W. H. Seemann, was submitted and passed as follows:

"The Committee on Resolutions begs to report that the Louisiana State Medical Society expresses its high appreciation and thanks to the following, to-wit:

"Dr. Edward L. King, President, and the members of the Orleans Parish Medical Society, hosts in this auspicious meeting.

"To President Dinwiddie and Dean Bass of the Medical Department of Tulane University, for the use of the offices and Green Room of the Hutchinson Memorial.

"To Dr. Arthur Vidrine, Dean of the Louisiana State University Medical Center, and Superintendent of Charity Hospital, and his staff, for their splendid luncheon, and for copies of the excellent report showing the development of this great hospital.

"To the retiring President, Dr. Roy B. Harrison, in appreciation of the able, tactful administration.

"To Dr. P. T. Talbot, Secretary-Treasurer of the State Society, for the fine manner in which he has conducted the affairs of his office, evidenced by the outstanding progress manifested in the affairs of the Society.

"To Mrs. Mary Crossen Kagy, Assistant Secretary-Treasurer, and Miss Shirley Osborne of the Louisiana State Medical Society for their devotion to duty and interest in the discharge of their duties.

"To Dr. J. J. Ayo, Chairman of the House of Delegates, for the expeditious and impartial rulings that gratefully facilitated the sessions of the House of Delegates."

After due nomination the following officers and committees were elected:

President—Dr. C. A. Weiss, Baton Rouge.

President-Elect—Dr. S. Chaille Jamison, New Orleans.

First Vice-President—Dr. J. H. Slaughter, Bogalusa.

Second Vice-President—Dr. Marcy J. Lyons, New Orleans.

Third Vice-President—Dr. George Wright, Monroe.

Councilors:

Third District—Dr. C. C. DeGravelles' vacancy was not filled.

Sixth District—Dr. Clarence A. Lorio, Baton Rouge.

Seventh District—Dr. Claude A. Martin, Welsh.

Eighth District—Dr. Jack T. Cappel, Alexandria.

Committees:

Committee on Scientific Work—Dr. P. T. Talbot, Chairman; Dr. A. E. Fossier, both of New Orleans; Dr. T. P. Lloyd, Shreveport.

Committee on Public Policy and Legislation—Dr. F. M. Johns, Dr. C. Grenes Cole, Dr. P. T. Talbot,

Secretary-Treasurer, all of New Orleans; Dr. Glenn J. Smith, Jackson; Dr. C. A. Weiss, Baton Rouge, President.

Committee on Medical Defense—Dr. J. C. Willis, Shreveport, for a term of three years; Dr. H. W. Kostmayer, New Orleans, for a term of one year, to serve the unexpired term of Dr. Henry Daspit.

Committee on Hospitals—Dr. Chas. Chassaignac, Chairman, New Orleans; Dr. J. L. Scales, Shreveport; Dr. O. P. Daly, Lafayette; Dr. C. P. Gray, Monroe; Dr. A. J. Comeaux, Youngsville.

Committee on Health and Public Instruction—Dr. W. H. Seemann, Chairman; Dr. F. R. Gomila, both of New Orleans; Dr. G. M. G. Stafford, Alexandria; Dr. J. Q. Graves, Monroe; Dr. J. K. Griffith, Slidell.

Committee on Journal—Dr. John A. Lanford, New Orleans, for a term of three years.

Delegate to the American Medical Association—Dr. J. Q. Graves, Monroe, for 1934 and 1935.

Alternate to the American Medical Association—Dr. J. B. Vaughan, Monroe, for 1934 and 1935.

Dr. J. J. Ayo, Raceland, was elected unanimously as Chairman of the House of Delegates.

Shreveport, Louisiana, after a favorable presentation, was accepted as the next meeting place of the Society for 1934.

There being no further business the House adjourned.

Immediately afterwards a General Meeting was called, and the new president, Dr. C. A. Weiss, of Baton Rouge, was introduced and made a few remarks concerning his future policies.

The Report of the House of Delegates to the General Assembly was accepted. There being no further business the Society adjourned until the next Annual Meeting.

Respectfully submitted,

P. T. Talbot, M. D.,
Secretary-Treasurer.

REPORT OF THE COMMITTEE ON MEDICAL DEFENSE

To the Officers and Members,
House of Delegates, 1933,
Louisiana State Medical Society.
Gentlemen:

The Committee on Medical Defense wishes to report that since the last Annual Meeting several important cases for members of our State Society have come up for consideration. We are very glad to report that these cases were satisfactorily adjusted without litigation.

We very regretfully wish to report the untimely death of one of the members of our committee, Dr. Henry Daspit. He rendered valuable service to the Committee and his loss will be felt by the Committee as well as other members of our State Society.

Attached hereto you will find a financial report of the Trust Fund in the custody of the Trust Department of the Whitney Trust and Savings Bank, of the various securities held by them for this fund, totaling \$7,394.00. The Trust Fund is being built up at the rate of fifty cents per capita per year until it shall have reached \$10,000.00. Attached also you will find report of the Savings Account of the Medical Defense Fund, which shows a balance of \$346.79.

The Honorable St. Clair Adams, as counselor for the Medical Defense Committee, has rendered invaluable service to the Committee in the handling of the various matters which were presented to him for his consideration.

Respectfully submitted,

R. O. Simmon, M. D.,

Chairman, Committee on Medical Defense.

EQUITY FROM MEDICAL DEFENSE TRUST FUND FOR GENERAL FUND

Advanced 1931 in Bonds	\$2,615.74
Due from General Fund 1931 (1213 members at 50 cents each)	\$ 606.50
Due from General Fund 1932 (1175 members at 50 cents each)	\$ 587.50
	<hr/>
	\$1,194.00—\$1,194.00

JANUARY 1, 1933—BALANCE DUE
GENERAL FUND \$1,421.74

MEDICAL DEFENSE FUND

LOUISIANA STATE MEDICAL SOCIETY FINANCIAL REPORT

Balance in Medical Defense Fund Savings Account on April 1, 1932	\$1,889.92
Interest on Securities up to April 1, 1933	480.96
Payment of February, 1932, unpaid coupon on Parish of Avoyelles	12.30
Payment of August, 1932, unpaid coupon on Parish of Avoyelles	12.03
Payment of unpaid February, 1933, coupon on Parish of Iberia	25.00
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	\$2,420.21

EXPENDITURES—FROM SAVINGS FUND:

Paid to General Fund money due since May 7, 1929, through Feb. 20, 1932	\$1,138.28
Purchase of Bond, 4th Liberty Loan Gold Bond of 1933-1938	520.97
Unpaid August, 1932 coupon, Parish of Avoyelles	12.50
Unpaid January, 1933 coupon, Parish of Tangipahoa	26.67

Unpaid February, 1933 coupon	
Parish of Iberia	25.00
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	\$1,723.42—\$1,723.42
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BANK BALANCE APRIL 1, 1933.....	\$ 696.79
Paid from General Fund to Mr. St. Clair Adams, retainer's fee for 1933, due back to General Fund.....	\$ 350.00
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ACTUAL BOOK BALANCE APRIL 1, 1933	\$ 346.79

REPORT OF COMMITTEE ON PHARMACY
To the House of Delegates
Louisiana State Medical Society
Gentlemen:

We beg to submit the following report of the Committee on promoting improved relations between the physicians and pharmacists of Louisiana.

Promptly upon our appointment we notified the officers of the Louisiana State Pharmaceutical Association and your Chairman was invited to address a district meeting of that body. We availed ourselves of this opportunity and were most cordially received. The State Pharmaceutical Association also appointed a committee to co-operate with us and a joint meeting was held shortly afterward.

The druggists frankly acknowledge the evils of counter-prescribing and are more than willing to use their best efforts to curtail this rather common custom. The better element in the profession feels that this practice is not altogether general, and that in many of the best pharmacies it is limited to emergencies. They feel that this situation can and will be improved.

With characteristic promptness and thoroughness the officers of the Pharmaceutical Association sent out a questionnaire to 250 leading druggists asking for suggestions. They have submitted to us a digest of these replies. Some of these that are of special interest are presented to you at this time for your consideration.

1. The custom of doctors handing out original packages of samples to patients.

Pharmacists feel that this practice results in the patients going directly to the druggist when more of the same type of medication is needed, leaving the doctor entirely out of consideration in the matter of future purchases. This does not usually militate against the pharmacist, but does injure the physician directly and indirectly. Directly, through the loss of patronage by these patients in the future. Indirectly, through these individuals recommending to various and sundry the particular drug, and these additional potential patients making their purchases directly from the drug store. In other words, it encourages self-medication to the detriment of the physicians' interests, if not of the

pharmacists', and certainly strengthens a tendency that is not best for the patients themselves.

2. The custom that many physicians have of telling a patient what to use instead of writing a prescription.

This seems to be particularly the case when the physician is handling patients by telephone. For example, a patient telephones a physician that he is having difficulty in sleeping—the doctor tells him to take some veronal; or the patient telephones that he is having an attack of asthma (the night is cold and the doctor is tired)—the doctor tells him to take an ephedrine capsule. This patient may in the future go directly to the drug store, pass the good tidings to his neighbor, and the vicious train is started, not interfering so much with the welfare of the pharmacist as with the physician and the suffering public.

3. The telephoning of narcotic prescriptions.

It has been decided by the Federal Government that both the druggist who accepts a prescription in this way and the doctor who dictates it are subject to criminal prosecution.

4. The failure by the physician to put the name and address of the patient on a prescription.

It is required by the Federal Government that the names and address of the patient be given on all narcotic prescriptions. This is now required by the State law on all prescriptions. Failure to do this takes no money out of the druggist's pocket but may cause considerable embarrassment to all concerned and often much delay in getting the medicine to the patient.

5. The physician's telling the patient what the prescription will cost.

Few physicians are conversant with the current prices of drugs. When the druggist delivers a prescription and names a price higher than that stated by the prescriber, the patient complains (loud and long). The druggist must, therefore, acknowledge that he is a thief or an extortionist, or expend much oratory in convincing the customer that the doctor did not know what he was talking about. Druggists prefer to cooperate in educating the public in the belief that the doctor knows everything and is infallible.

6. Prescribing drugs by their common names.

For example, instead of writing a prescription for Acetylsalicylic Acid, he writes it for Aspirin. The patient reads the prescription, and the next time he thinks that he has the same condition, he merely buys some Aspirin at the drug store; or he tears up the prescription in the first place, and takes Aspirin according to the directions which he can read. The druggist makes his sale, but the doctor is left out and self-medication is encouraged.

It is urged that physicians in prescribing use the names as given in the U. S. Pharmacopia.

In the early experience of your chairman as a

physician, when patients were few and dollars fewer, he was called to see a child of a well-to-do family, found a case of sore throat and ordered Aspirin. Soon after this he was called to see another member of the same household. This child had a cold and he again prescribed Aspirin. He did not hear from this family for several months, when he happened to meet the mother who told him that they had had lots of sickness and that several times she had thought that she would have to send for him. Her husband, however, had bought a bottle of Aspirin tablets, as he had noticed that the physician always prescribed Aspirin, and they had been getting along wonderfully well. (Do you wonder that one physician has never prescribed "Aspirin" since that good day.)

7. The prescribing of a patent medicine when a perfectly ethical formula of the U. S. P. or N. F. is available.

The druggists feel that there is a tendency to reduce them from expert pharmaceutical chemists to slot machines. Also that these patent preparations are more expensive to the patient and are less perfectly standardized.

8. That certain welfare and related organizations are really practicing medicine to the exclusion of the physician in many instances.

The druggists prefer to get their prescriptions from regular, "honest-to-goodness" physicians, and the physicians probably feel the same character of hankering.

9. There is a tendency on the part of the physician to blame the druggist without due investigation whenever something seems to be wrong.

The druggist is usually more than willing to protect the physician to the full extent of his ability, he merely begs for a measure of reciprocation.

10. Druggists rather deplore the tendency of physicians to recommend, without due reason, the product of some particular manufacturer.

One pharmacist reports that he finds it necessary to keep twenty different makes of Tincture of Digitalis. This prevents his keeping all of these as fresh as he would like.

There were some other suggestions of less importance that might be considered at a future time.

Your Chairman being a "reformed" druggist of rather large experience, agrees whole-heartedly with all of the preceding contentions.

We believe that the pharmacists are anxious to do their part, that the same desire will animate the members of the medical profession, and that much good will ultimately result. Looking toward the accomplishment of this, we beg to make the following recommendations:

1. That a committee from this Association be continued to cooperate with a similar committee from the Pharmaceutical Association.

2. That the custom of appointing a delegate to the Pharmaceutical Association, inaugurated this year by President Harrison, be continued.

3. That this report be published at an early date in the official journal of the Medical Association, and that the members of the medical profession throughout the state be requested to send to the committee suggestions working toward the improvement of mutual relation between physicians and pharmacists.

In submitting the above report for your enlightenment, the Committee respectfully asks that doctors throughout the State communicate with the Chairman as early as possible making any constructive suggestions that they might think of value.

Respectfully submitted,

E. Z. Brown, A. A. Herold, R. H. Potts,
R. O. Simmons, E. L. Zander, O. W.
Bethea, Chairman.

SUPPLEMENT TO THE REPORT OF THE COMMITTEE ON MEDICAL HISTORY*

Tempora mutantur et nos mutamur in illis

In preparing a history of the evolution of Medicine in Louisiana, I have found it interesting and instructive to compare the present status of medical practice with that which prevailed fifty-three years ago when this Society was founded. Incidentally, and as a foundation for this study, it became necessary to undertake a statistical survey of the profession of the state in its relations to the general population with special reference to the ratio of doctors to the general population as this is exhibited in the census of the different parishes. From this survey we have obtained fairly accurate information on the regional distribution of the medical population showing how this is unequal and unbalanced with a steady drop from the rural to the urban and more populated districts, a fact well demonstrated by the statistical experience of the last five years.

This survey has also afforded a favorable opportunity to note the progress of the propaganda for medical organization as revealed by the numerical distribution of the membership of the Society in the sixty-four parishes of the state. Several of the conclusions drawn from the present survey had been anticipated as far back as 1894—38 years ago—when, as President of the Society, I compiled the first medical directory of the profession in Louisiana with a view to a state-wide organization of the profession, based upon a detailed inquiry into the forces that were eligible for membership. That

*The synopsis of the report will be published in the July number of the Journal.

survey has served as a good basis for comparison with the present more accurate study, since the sources of statistical information are more readily available than they were then.

The comparison shows that during its intervening thirty-eight years notable progress has been accomplished in our organization. Our membership has increased from 400 members in 1895, to approximately 1176 in 1933, and that from a representation of 33.3 per cent of the eligible practitioners we now claim 58 per cent in our membership. In 1895 the state was divided into 59 parishes and the Society was represented by its individual membership in 47 parishes, or over 70 per cent of its whole parish constituency, but in 19 parishes the Society was not represented by a single member. In 1919, the plan of organization was changed in conformity with the reorganization of the American Medical Association. The membership of the Society which hitherto had been individual, was now organized into Parish Societies, as its constituent units, and the House of Delegates was constituted by the Parish Delegates. Now, in 1933, our constituency is organized into 44 affiliated Parish and 8 District Societies with representation in all of the 64 Parishes by members, whether organized or not into societies. Despite this progress, the propaganda for organized medicine has lagged and, in fact, during the last three years declined from 66 per cent of the licensed graduates of the state, in 1929, to 58 per cent in 1933. In this seeming indifference to the benefits and advantages of medical organization we are not alone, but share in the same complaint with many distant and neighboring states. How to account for this general apathy in medical organization, is the question.

The financial depression which has hung like a pall over the whole country during the last five years, culminating in the present "Banking Crisis" with its ruinous consequences upon the prosperity of the whole country, inflicting pecuniary losses upon the men of our profession greater in proportion than in any other class of individuals,—has been held chiefly accountable for this seeming neglect of the opportunities afforded for professional and social improvement offered by membership in the State Society. But there are other and more deeply rooted causes that may be at the bottom of this unhappy situation. There can be no doubt that as Society is at present organized, the demand for paid medical service is decreasing in Louisiana as elsewhere in the civilized world. Attention has been called to the fact "that during the last half century the demand for individual medical service has been reduced as a result of the discoveries of medical science for the prevention and control of disease. Yellow fever, cholera, malaria, typhoid fever, small pox, diphtheria, hookworm, pellagra are a few familiar examples of the

diseases which gave plenty occupation to the doctors of Louisiana 50 years ago, but have now become extinct or appear only sporadically in negligible quantities. As a result of the campaigns conducted by organized medicine aided by municipal, state and federal government, philanthropic foundations and social units in an effort to prevent eradicable diseases, the demand for individual medical service has likewise been reduced. The demand for pay service has been further reduced by the operation of free clinics, Charity Hospitals and service rendered free by municipalities, states and the federal government. Not only the demand for paid medical service has been reduced, but there has been a rapid increase in the production of doctors all out of proportion to the population. Our survey shows that Louisiana, like the rest of the civilized world is suffering from a plethora of doctors.

The recent report of Dr. Fossier, Chairman of the Orleans Parish and State committee on hospital abuse, shows conclusively that in Louisiana, with New Orleans as a striking example, paid medical service has enormously decreased through the encroachment of the free clinics and hospitals established by the state, the municipality, the federal government and private institutions. According to his estimate, 1 out of every 3.50 residents of the city is a beneficiary of medical charity.

Dr. B. F. Beasley, of Atlanta, Ga., in a recent and very thoughtful paper on the "Economic Status of the Medical Profession" (*Jnl. A.M.A.*, Oct. 15, 1932) reports that "conservatively estimated, at least 50 per cent of the sick of Atlanta are charity patients, thus leaving each doctor in that city a little community of only 259 people who are able to pay."

Quoting from the same authority: "at the present time the seventy-six medical colleges (all class A) in the United States, are graduating a sufficient number to supply the world. At the present rate of increased production of doctors and decreased demand for paid service, the next few years will see a doctor for each pay patient."

In the meantime, there has been an almost unbelievable improvement in transportation and all facilities of communication. The telephone and automobile has made it possible for an active, alert and well equipped practitioner to do ten times the work of the old family physician of the horse and buggy period.

On the other hand, the progress of the medical sciences has made it impossible for the individualistic and polyvalent general practitioner and family physician of 50 years ago to cope single handed with the problems of diagnosis, treatment and prevention of disease. The medical school, taking cognizance of these advances trains the future practitioner to utilize highly technical laboratory methods of medical investigation (x-Ray, clinical

pathology, biochemistry, electro-cardiography, metabolism, etc.) as aids to diagnosis, prognosis and treatment. These, in the aggregate, are only available in well organized and equipped hospitals with specialized staffs including anesthetists and a full complement of trained nurses, dietiticians, technicians, etc.

In consequence, hospitalization has become the rule and with it the cost of medical care has risen to such high levels of over head expenditure that none but the wealthy or well to do,—or the very indigent charity patient can benefit by them. The working man, the day laborer, the small salaried man and other wage earners also would not be pauperized, but with means barely sufficient to meet the needs of a living existence, must suffer the consequences of an inadequate and at best an unsatisfactory medical service provided by the numerous and varied forms of health insurance afforded by the working men's compensation laws, the industrial, trades unions, fraternal societies and other types of organized associations for mutual relief. These are all based upon a contract system and the insurance principle with salaried physicians or a medical group as the dispensing agents of medical mass relief. They all tend towards the socialization of medicine with all its objectionable bureaucratic features, its loss of personal interest and divided responsibility in the treatment of the sick. The attempts to provide medical relief for the industrialized and middle classes by the governments of Germany, France, England, Russia and other European countries have uncovered the evils of socialized medicine under government control and made any such system of mass relief extremely prejudicial to the best interests of the profession and the people. To overcome the objections to the socialization of medicine by state control or by other agencies extraneous to the medical profession and yet provide adequate medical relief and the benefits of modern hospitalization for the mass of wage earners of limited means is the present and most compelling preoccupation of the medical profession and of the great philanthropic foundations of this country. It is the inequality of the medical service and the uneven distribution of the burdens of sickness that accounts for the public clamor regarding the high cost of medical care that has been agitating the public mind in recent years, and is now making imperative demands on the medical profession for its equitable adjustment without injury to the professions and with justice to the suffering public.

Two great contributions to the intelligent and fair discussion of this all absorbing subject have recently appeared. One is the report of the Commission of the "Medical care of the American people," and the other the report of the "Commission on Medical Education." Both these works are the

result of years of laborious research by leading experts in medical sociology and education in all its branches, in public health, economics and in organized philanthropy. The labor and cost of these investigations have been separately financed by contributions from the great philanthropic foundations, the American Medical Association, the American Medical College Assn. and other allied interests concerned. The report of the Commission on Medical Care was completed and published last November in 28 volumes. The information contained in this publication is encyclopedic in scope and considers the problem of medical care in all its phases from the view point of the profession and the public in their multiple sociologic, economic and medical relations. The final conclusions and recommendations of this Commission do not harmonize and are divided by majority and minority reports. The majority recommended that medical service in general be rendered by organized groups of physicians centered in a hospital prepared for complete home, office and hospital care. It encourages the maintenance of high standards and the preservation of the personal relations between the patient and the physician. The cost of the service to be sustained on a group payment, but non profit basis, through insurance, taxation or both methods, and at a low cost *per capita* that will make it available to the wage earner and man of limited means. The majority report is a distinct step towards the socialization of medicine, but without the objectionable features of State Control.

The minority report insists that whatever system of group medicine is practiced it should be under the control of the medical profession; it must include all or the majority of the members of the County or Parish medical society; it must guarantee the free choice of the physician by the patient. The Community should provide for the care of the indigent and whatever plan to finance the service, whether by insurance or taxation, it should be entirely separate from any plan providing for cash benefits.

The report of the "Commission on Medical Education" differs from its immediate predecessor in that it is uniform in its recommendations that medicine continue along individualistic lines, but with self administered improvements. It is a masterly summary condensed in a single volume of 560 pages, bustling with tables, statistics and facts all presented with great lucidity and force in a continuous and logical style that makes it a most impressive and inspiring document.

The text and conclusions of these two reports have been made familiar to the members of this Association by their publication in the official organ, the New Orleans Medical and Surgical Journal, beginning with the December issue and continuing in subsequent numbers.

The reports of these two Commissions are more suggestive than conclusive, but in reviewing and analyzing a complex problem they provide a mine of authoritative and well digested information from which the medical leaders and statemen of the profession may cull the knowledge and the wisdom that is required to adjust the present unsatisfactory social, medical and economic relations of the medical profession and the public.

What we gather from all this discussion is that the medical profession is "the Trustee of the essential knowledge and has the personnel necessary to solve the present social, educational and economic problems that now face it in its relations with the public. A realization of its responsibilities is introducing new thinking into the profession and challenges the highest order of leadership to make current and future knowledge of the diagnosis, treatment and prevention of disease available to everyone."

Again, in view of the unavoidable and rapidly advancing trend towards group medicine, hospitalization and health insurance, we must affirm "that any plan, whether developed from within or imposed upon it from without, which lessens the responsibility of the trained physician in the care and treatment of the sick or denies him the rewards of superior ability, will in the long run be detrimental to the public welfare."

"No scheme of organization or group responsibility can substitute for the priceless, discriminating and sympathetic judgement of the competent and conscientious physician."

* * *

Finally we would say to the physicians of Louisiana that at no time has the need of organization been more urgent than now. At no time has membership in the State Society been more desirable, or valuable to every individual who is a part of the medical collectivity in Louisiana. At no time in its history has the Louisiana State Medical Society been brought face to face with problems of greater importance to its own vital interests.

In the days of the foundation, 50 years ago, the profession of Louisiana was preoccupied with the importance of organization to combat more effectively the spread of epidemic and endemic disease. Later, as we grew stronger, the importance of organization as a barrier to the encroachment of the quacks and impostors who overran the State became apparent, and the chief interest was centered in the recognition of State Medicine and the enactment of legislative measures for the protection of the people, by establishing a State Board of Medical Examiners composed of State appointees selected from our membership. This long sustained effort was rewarded on June 26, 1894, by the enactment of a law which made effective the regulation

of the practice of medicine by creating our present State Board of Medical Examiners.

In 1905, our thoughts and energies were focused on the issue of the epochal battle against yellow fever which was crowned by the greatest victory of sanitary science achieved in the North American continent and which definitely protected the people of Louisiana and of the South from further invasion of this dread pestilence.

In 1917, our energies and activities were diverted from our accustomed functions by the exigencies of the great war and by the virtual enlistment of our entire membership in the military and civilian service of the Country.

And now, in 1933, our thoughts and activities are diverted and depressed, not merely by the financial crises that the Nation is going through, but by grave problems, not created by extraneous foes but by the menace of an economic and social revolution in our professional structure brought about by the struggle to adjust our old and traditional medical life to new and ever changing conditions of a far reaching and all compelling medico-social and economic environment. The problems that face the medical profession in Louisiana are national and international in their scope, but they have a special, regional significance for our State. And it is in the adjustment of the altered health requirements of the people and the medical profession of the State that this Society is especially concerned.

The time has come when no medical man can afford to remain isolated from his fellows without risk of professional deterioration. Every practitioner working in Louisiana should know what his professional brethren are doing for the betterment of the collectivity and indirectly for his own individual advancement. The Society, directly or through the meetings of its affiliated societies and through its official journal is an open forum for the exchange of ideas and the dissemination of knowledge in matters that now so urgently concern everyone of its members.

The State Society now, more than ever, needs to embrace in its membership the entire medical body of the state in order to exercise its judgment and authority as the official exponent of medical opinion in the commonwealth. No man who values his standing as an intelligent and progressive member of the profession and who cares for his own advancement in the eyes of his community can fail to recognize that the small contribution of a few dollars (\$6.00 annual dues) for the support of an organization that is exclusively devoted to his own interests, is an investment that will yield returns in the promotion of his own professional welfare that is beyond calculation in dollars and cents. It is these reflections, suggested by the needs of the hour and by the benefits that I have

derived from my membership during the fifty and more years that I have served in the ranks of the Louisiana State Medical Society that have prompted this appeal to the loyalty and support of its ideals of service and mutual betterment.

Rudolph Matas, M.D.,
Chairman.

SHREVEPORT MEDICAL SOCIETY

The regular monthly meeting of the Shreveport Medical Society was called to order at eight o'clock by the president, Dr. Frank H. Walke.

Roll call revealed sixty members and visitors present.

The report of the treasurer, Dr. McIntyre, showed that eight-one members had paid dues for the current year. The bank balance was seen to be \$310.78.

Dr. W. S. Kerlin, acting as chairman of the committee to investigate the application for membership of Dr. L. F. Gray, reported favorably, and Dr. Gray was unanimously elected.

A few words were spoken in behalf of the script being circulated by Centenary College, and the cooperation of the local doctors was urged by Dr. Morehead, of Centenary.

Plans for the organization of a Physicians and Dentists Credit Bureau to be operated in conjunction with the Retail Merchants Ass'n. were presented by Mr. Tyndall, a representative of a similar organization in Texarkana. It was moved by Dr. B. C. Garrett that the matter be referred to the ethics committee for approval. The motion was seconded and duly passed.

The scientific program was opened by Dr. J. E. Knighton, who presented a short but interesting discussion on the subject of The Uses of Insulin in Conditions Other Than Diabetes. After discussion of this by Dr. W. J. Norfleet, the program was continued by Dr. Urban Maes, of New Orleans. Dr. Maes brought us a most timely paper on the subject of Appendicitis After Forty. The paper consisted of a review of one hundred cases, with statistical discussions of the various features of the condition. This very interesting presentation was followed by hearty discussion.

J. E. Knighton, Jr.,
Secretary.

MADISON, EAST CARROLL, AND WEST CARROLL TRI-PARISH MEDICAL SOCIETY

The Tri-Parish Medical Society held its regular monthly meeting in Lake Providence, Louisiana, May 2, 1933.

The following members were present: Doctors W. K. Evans, W. H. Hamley, G. S. Hopkins, B. R. Burgoyne, G. D. Williams, B. C. Abernathy of East Carroll Parish; E. O. Edgerton, G. W. Gaines, E. S.

Freeman, H. C. Sevier, B. T. Ferguson, A. T. Palmer, L. Stevens, of Madison Parish; and L. A. Masterson, Jno. L. Kelly, B. L. Bailey, E. D. Butler, W. McG. Dollerhide of West Carroll Parish.

We were very glad to have a number of guests present at this meeting, namely: Doctors George Street, Dick Street, Charles Edwards, W. P. Robert, W. H. Parsons of Vicksburg, Mississippi, and Doctors J. B. Vaughan and M. B. Pearce of Monroe, Louisiana.

Dr. Vaughan, Councilor of the Fifth District, presented the Society with a charter from the Louisiana State Medical Society. Dr. Vaughan gave a short report of the meeting of the House of Delegates of the Louisiana State Medical Society which was recently held in New Orleans.

The scientific program consisted of the following papers:

"The Diagnosis of Heart Disease", by Dr. Vaughan of Monroe. Discussed by Doctors Ferguson and Edgerton.

"The Diagnosis and Treatment of Malignancies of the Breast", By Dr. George Street of Vicksburg. Discussed by Doctors Parsons, Vaughan, Pearce, Gains and Evans.

"Hypertension", by Dr. Burgoyne of Lake Providence. Discussed by Doctors Evans and Vaughan.

Tallulah was chosen as the next meeting place of the Society on June 6, 1933.

G. Douglas Williams, M.D.,
Secretary.

SEVENTH DISTRICT MEDICAL SOCIETY

The Seventh District Medical Society recently had a very successful meeting in Lake Charles. Dr. M. A. Stewart, Professor of Biology in Rice Institute at Houston, discussed "Fly Larvae Therapy in Treating Bone Wound Infections." Dr. J. B. Foster of Houston supplemented the report of Dr. Stewart. Papers were also read by Dr. S. Lewis, Beaumont, Dr. F. L. Barnes, Houston; and Dr. George Herrmann, Galveston.

The next meeting of the organization will be held at Elton this month. The following officers were elected for the ensuing year: Dr. A. B. Cross, Crowley, President; Dr. R. R. Arceneaux, Welsh, Vice-President; Dr. H. L. Gardiner, Crowley, Secretary.

LAFORCHE VALLEY MEDICAL SOCIETY

The Society met at Napoleonville, May 11, with 29 doctors present. Dr. T. H. Hanson, Donaldsonville, presided. Papers were presented by the following New Orleans doctors: Dr. Jackson Ayo, Jr., Dr. E. B. Vickery, Dr. Howard Mahorner, and Dr. Denegre Martin.

NEWS ITEMS

Dr. H. W. E. Walther, head of the department of urology at Southern Baptist Hospital, addressed the St. Tammany Parish Medical Society at Covington, La., on May 12th, his subject being "Rectoscopic Treatment of Prostatism."

Dr. Daniel N. Silverman of New Orleans has been elected a member of the Southern Branch of the Society of Experimental Biology and Medicine. Dr. Silverman was elected on his numerous experimental works, which received very favorable attention not only by this City but by the medical world of this country as well. He is also an active member of the American Gastro-Enterological Society.

Surgeon W. Y. Hollingsworth, was directed to proceed from New Orleans, La., to Galveston, Tex., and return, for the purpose of making a thorough investigation of certain charges.

Assistant Surgeon D. W. Patrick, was relieved from duty at New Orleans, La. and assigned to Marine Hospital, Seattle, Washington, for duty. May 1, 1933.

The American Proctologic Society will hold their Annual Meeting in Chicago, with headquarters in the Stevens Hotel, Monday and Tuesday, June 12-13, 1933.

The Chicago Medical Society will have a booth in the Hall of Science Building, Century of Progress Exposition of Chicago. They have extended a cordial invitation to visiting physicians to call at the booth, and they have offered to be of assistance in any way possible to members of the State Organizations.

The American Medical Golfing Association, will hold its Nineteenth Annual Tournament over the Blue Mound Country Club course, Milwaukee, on Monday, June 12. One hundred golfers are expected by the hardworking local committee, composed of Dr. John W. Powers, Chairman, Drs. J. O. Dieterle, G. H. Fellman, J. C. Griffith, W. F. Grotjan, E. W. Miller, S. R. Mitchell, C. W. Morter, H. S. Roby and Ralph P. Sproule.

Metabolic disorders will be the theme of the 1933 Graduate Fortnight of the New York Academy of Medicine. Two weeks of intensive study, from October 23 to November 3 inclusive, will be devoted to this important branch of medical science. Among the speakers who will participate in the Graduate Fortnight are included Drs. Eugene F. DuBois, Harold E. Himwich, Walter W. Palmer, Frank H.

Lahey, Donald Dexter Van Slyke, Joseph C. Aub, Ashley Weech, Dana W. Atchley.

The American College of Physicians will hold its Eighteenth Annual Clinical Session in Chicago, with headquarters at the Palmer House, April 16-20, 1934.

Dr. George Morris Piersol, of Philadelphia, is President of the American College of Physicians, and will arrange the Program of General Sessions. Dr. James B. Herrick, Emeritus Professor of Medicine of Rush Medical College, Chicago, has been appointed General Chairman of local arrangements and will be in charge of the Program of Clinics.

The Fifth International Medical Post-Graduate Course will be held in St. Moritz, August 13-27. A magnificent program has been provided, with men of international reputation holding the conference. The details of this meeting are on file in the Journal office for those who may be interested.

CHARITY HOSPITAL CANCER CLINIC

Dr. Arthur Vidrine, Superintendent of Charity Hospital, has announced that a new Cancer Clinic will be opened June 1. Dr. James T. Nix will be the Executive Director of this new clinic, and the following Staff will be associated with him. Dr. Urban Maes, consultant surgeon; medicine, Dr. George S. Bel; ear, nose and throat, Dr. Homer Dupuy; eye, Dr. Henry Blum; dermatology, Dr. J. Numa Roussel; gynecology, Dr. Peter Graffagnino; urology, Dr. P. Jorda Kahle; radiology, Dr. Amedee Granger; pathology, Dr. Rigney D'Aunoy, and biochemistry, Dr. H. Beard.

THE AMERICAN CONGRESS OF RADIOLOGY

Four national radiological societies, the American College of Radiology, the American Radium Society, the American Roentgen Ray Society, and the Radiological Society of North America, will eliminate the regular annual meeting for 1933 and meet together in Chicago, September 25-30. An extremely extensive and broad program has been prepared for this meeting, which will be participated in by radiologists in this country, Europe, Central, and South America. Dr. Leon J. Menville of New Orleans, and Dr. Lawrence Reynolds of Detroit are co-chairmen of the Sub-Committee on Publications. Dr. Henry K. Pancoast will be President of the Congress.

HEALTH OF NEW ORLEANS

The Department of Commerce, Bureau of Census, has issued the following weekly reports concerning the health of New Orleans. For the week ending

April 15, there were reported 129 deaths, divided white 73, colored 56, with a death rate for the whole 14.0, for the white 11.1, and for the colored 20.9. The infant mortality rate this week was 53. The following week, ending April 22, saw almost an exact repetition of the figures of the previous week, there being one more death reported among the colored population, and giving figures that corresponded almost exactly to the previous week. The infant mortality of this week was only 45. For the week which came to a close on April 29, there was an increase in the total number of deaths, 148 being reported, giving a rate of 16.0. There were 86 white deaths, the rate being 13.1, and 62 in the negro population, bringing about a rate of 23.2. The infant mortality rate was still low, being only 56. For the week of May 6, there were 10 less deaths than in the previous week, the rate being 14.9 as a result of 138 deaths, divided 83 white and 55 colored, the rate for the two races being respectively 12.7, and 20.6. The infant mortality rate was only 50, due to only two deaths in colored children, making the colored mortality 31. The death rate for the first 18 weeks of the year is 16.1, as contrasted with a rate of 15.9 in the year 1932.

INFECTIOUS DISEASES IN LOUISIANA

Dr. J. A. O'Hara, Epidemiologist for the State of Louisiana, has issued morbidity weekly reports, which briefly abstracted contain the following information. For the week ending April 22, the following cases were reported in double figures: Seventy-six of syphilis, 55 of measles, 47 of gonorrhea, 21 of typhoid fever, 20 of pneumonia, 15 of scarlet fever, 14 of cancer, 12 of diphtheria, 11 of whooping cough, and 16 of pulmonary tuberculosis. The next week, which ended on April 29, saw a big increase in the number of cases of tuberculosis reported, there being 45 listed for this week, more than any other reportable disease. The mild epidemic of measles continued, 41 cases being reported, and of the other diseases listed the following were the important ones: Twenty-seven of syphilis, 19 each of pneumonia and cancer, 18 of gonorrhea, 14 of typhoid fever, and 10 of whooping cough. One case of poliomyelitis was reported. The 14 cases of typhoid fever were distributed, one case to each of 14 parishes. For the week completed May 6, there were reported: Thirty-three cases of measles, 23 of syphilis, 21 of chicken pox, 16 of cancer, 11 of tuberculosis, 10 each of pneumonia and scarlet fever. One case of meningitis was reported from LaSalle Parish. For the week ending May 13, syphilis took its customary place as being the most frequently reportable disease, there being 47 cases listed. There were also reported in double figures: Twenty-five cases of pneumonia, 24 of measles, 21 of pulmonary tuberculosis, 19 of can-

cer, 17 of gonorrhea, 16 of typhoid fever, and 11 each of influenza and diphtheria. Of the 16 cases of typhoid fever, 3 cases were from East Baton Rouge Parish, 4 from East Feliciana Parish, and 4 from St. Landry Parish. One case of leprosy was reported from St. Tammany Parish, 1 case of smallpox from Rapides Parish, and 1 case of tularemia from DeSoto Parish.

WOMAN'S AUXILIARY NEWS

Owing to our inability to have a State Medical Convention this year, of course the Auxiliary, too, did not hold its annual meeting. To carry on the usual procedure in such case, the Executive Board was called together by Mrs. Robert T. Lucas at her home in Shreveport, and the necessary business transacted.

Mrs. John H. Musser, the President-elect, automatically became president and the other officers remained unchanged, as per our constitution. A new president-elect was selected, Mrs. T. Henry Watkins of Lake Charles, and we begin another year.

While attending the meeting in Shreveport, our President, Mrs. John H. Musser, was the honor guest at several beautiful entertainments. The following from the Shreveport papers tells us about the delightful tea the officers of that auxiliary gave in her honor:

"A delightful tea was given by the officers of the Woman's Auxiliary to the Shreveport and Louisiana State Medical Societies, in the home of Mrs. F. G. Ellis, honoring Mrs. John H. Musser, the president-elect of the auxiliary.

"The spacious rooms of Mrs. Ellis' lovely home were artistically decorated in baskets and bowls of radiance roses, lavender iris, and shasta daisies.

"Assisting in the courtesies were officers of the state and local auxiliary.

"Mrs. W. J. Norfleet welcomed the guests as they arrived.

"Receiving in the drawing room with Mrs. Ellis were Mrs. A. A. Herold, Mrs. John H. Musser, of New Orleans, Mrs. W. P. Yerger, Mrs. C. R. Bowen, Mrs. P. W. Watkins of Lake Charles, and Mrs. J. B. Berton of Minden.

"In the music room where Miss Glynn Ellis entertained the guests with several piano selections, Mrs. J. M. Bodenheimer, Mrs. T. D. Boaz, Mrs. J. T. Crebbin, Mrs. C. E. Rew, and Mrs. Ellis' mother, Mrs. A. Gwin, received.

"The dining room, in green and white, made a lovely background for the doctor's pretty young daughters who served.

"Mock orange blossoms in silver bowls were used in profusion. The lace covered tea table held as its central decoration a large silver basket of Easter lilies, shasta daisies and fern. White tapers burned in silver holders and at either end of the table

the silver services were presided over by Mrs. J. E. Heard and Mrs. W. S. Kerlin.

"Dainty cakes and confections were passed by Miss Rosa Herold, Miss Glynn Ellis, Miss Margaret Ellis, and Miss Fanny Belle Richardson.

"A large number of guests called during the tea hours."

We intend to print all the reports sent to us from the various Auxiliaries throughout the State during the summer months, and as our State President for 1932-1933 resides in Shreveport, we are giving Caddo first place. This privilege has been extended to us by this Journal for which we are deeply indebted to the Editor.

The following is a letter to the State Auxiliary from our past president, Mrs. Lucas, which conveys so many messages to all of us that we hope the members will read it and carry out all the splendid suggestions made therein:

To the Members of the Women's Auxiliary of the Louisiana State Medical Society:

"An informed Auxiliary membership, both active and potential." Do you recall that innocent-sounding 'aim' your president stated as her goal for 1932-33? If you laughed at me then, remember, I am laughing best, for I am laughing last. That was an aim exceeded only by Sir Francis Bacon, so far as I know, when he said with Elizabethan boundlessness, 'I have taken all knowledge for my province.' But my vintage is World War and I should have been cynical. I thought the aim exceedingly worthwhile and one to be achieved in a surging enthusiasm. I beg indulgence now for my 1932 naivete.

"Having given you that yardstick, I now must submit the year's work to measurement by that same yardstick. I have come to realize it is a golden yardstick, a magic measure. As an achievement is measured by it, the glory of the achievement is enhanced by the radiance of the measure, and lo, the magic measure is lengthened thereby. Come, My Woman's Auxiliary to the Louisiana State Medical Society, and be measured by the Magic Golden Yardstick.

"There are 64 parishes in the state. In 42 parishes there are organized Medical Societies. In 7 parishes there are organized Woman's Auxiliaries. They are: Caddo, Calcasieu, Jefferson Davis, Morehouse, Orleans, Ouachita, Webster. The total Auxiliary membership is now 376, which is 72 less than last year.

"Organization Chairman, Mrs. George Kreeger of Lake Charles, did a very fine and enormous amount of work. Knowing full well that feeling of many doctors in the state was not cordial toward the Auxiliary. Or should I say they were 'not informed'? That is better. Knowing that, we did not emphasize organization as such, hoping to inform

people about our work and create a real desire for auxiliaries. Pursuing this policy, Mrs. Kreeger wrote 805 letters to wives of doctors in parishes where there were no auxiliaries. She wrote special letters to 'key' wives, and she wrote to doctor presidents and secretaries in organized parishes. Mrs. Kreeger and Mrs. Olin Moss, Councilor from the Seventh District, organized the new group we have this year in Jefferson Davis, with nine members and Mrs. T. H. Harrell as president. Mrs. Kreeger carefully followed up her work, inviting the new group over to Lake Charles for the May meeting. There will be no danger of foundling auxiliaries being left on medical society doorsteps when Mrs. Kreeger is organization chairman! She also wrote letters to interesting groups in the Convention. In addition to her letters, your president wrote to each president of an unorganized parish trying to create simply an inquiring attitude of mind and expecting to demonstrate the answers at convention in Lake Charles. I wish each one of you could read the replies I received. Verily, the 'potential' auxiliary is somewhat more 'informed.'

"Pursuing our aim, the state bought twenty-four of the Handbooks compiled and published by National. These were distributed to the State officers, Chairman of Standing Committees, and to the presidents of parish auxiliaries, with a statement of its purpose, the price, forty cents, and a request to equip it with eyelets, a cover, and turn it over to the successor in office. The Handbook was received in wonder and gratitude by everyone. The possessors of the Handbook are much better 'informed.' I wonder if Mrs. McGlothlan realizes what a gigantic service she rendered the Auxiliary when she compiled it?

"When Mrs. Jacob M. Bodenheimer took over the portfolio of Program and Health Education, she set about planning a program for Louisiana, hoping to have some definite plans to submit at Convention and hoping to get a state program adopted. We need one central project to knit us together in Louisiana. However, such a program could not be effected without the approval of our Advisory Council from the State Society, and we had no such Council. This fell on Mrs. Bodenheimer like a blow. As I have said, mine is not a timid heart, but neither do I belong to that vast concourse that 'rushes in where angels fear to tread.' So when my request for an Advisory Council was answered with 'House of Delegates', I was non plussed. Later, upon the advice of Dr. Harrison, Mrs. Bodenheimer dropped her plans for carrying further 'Health Education' this year.

"I left the matter of an Advisory Council on the 'knees of the gods' and it is my very great pleasure to report that the retiring state president, himself, asked the House to give us an Advisory Council of five members and the House voted unanimous ap-

proval. So, in the matter of Advisory Councils we are not only 'informed,' but we are practically in possession.

"Our Finance Chairman, Mrs. A. Dent Tisdale, had the job of making the budget this year, only we turned out not to have the 'makings'. On that score we are 'informed.' 'Economic emergency' and 'financial stringency' have been the warp and the woof of our 1932-33 Carpet which turned out not to be magic.

"In the matter of legislation we measure our Chairman, Mrs. John L. Scales and her efforts, not our achievements. She tried valiantly to get some program material for Auxiliary study of health legislation in Louisiana, health laws existing, and the workings of our magnificent State Health Department, but she worked without reward, unless Virtue is its own reward!

"I do a little conscientious blushing in the matter of 'Public Relations'. We ought to have had a better report. Mrs. Frederick G. Ellis, Chairman, worked intelligently and indefatigably, but she got no written evidence. Every auxiliary in the state does Public Relations work, and I hate to see you shy off in holy horror from that name. Here are some of the things done which I consider Public Relations work par excellence. Mrs. Gowen was state P. T. A. chairman of 'Summer Round-up'. Another member, Mrs. Allums, had a boy's class in hygiene organized in a grade school, with a doctor to teach it, just a quiet little agreement between herself and the principal, but the idea spread to other schools. One member went to see a high school principal who had allowed one of these gland quacks to talk an hour in assembly. She pointed out that speakers on health before public schools should be approved by the city medical society. The interview ended happily. From 4 to 9 lectures a month on Social Hygiene were sponsored by the New Orleans Auxiliary and they underwrote a Social Hygiene Institute for the city, which, of course, had to be cancelled. In tuberculosis work all over the state the auxiliaries have led.

"We are proud of our Hygeia record. Our chairman, Mrs. L. Wailes Gorton, did most effective publicity work for the magazine, and had a Hygeia exhibit at the state P. T. A. meeting where it was highly praised. Our quota for Hygeia was 40 and we returned over 100 subscriptions, due largely to New Orleans efforts. Lake Charles persuaded the parish superintendent to include Hygeia in his school budget for next year. They also gave a cash prize for the best seventh grade essay based on Hygeia. Monroe gave subscriptions to schools and other groups.

"The following Constitutional Amendments were adopted. Article VIII of the By-Laws, was amended to read: 'The fiscal year shall begin March 21 and end March 20th, of the following year.' Article

V of the By-Laws was amended by adding Section 5, which reads: 'In case there is no annual meeting, the president-elect shall assume the duties of the office of president at a date fixed by the Executive Board corresponding as nearly as possible to the date previously set for the annual meeting. The Executive Board shall be empowered to elect a president-elect. All other officers shall continue in office.' There are other changes which I think would make our constitution more livable and which I had hoped to have submitted at convention by Mrs. Rae B. Leavell, the Chairman of Revisions.

"Our history has been written by Mrs. Herman B. Gessner, assisted by a committee: Mrs. Shirley Lyons, and Mrs. Wilkes Knolle. They also made a scrapbook of the Woman's Auxiliary meeting of the A. M. A. in New Orleans, which was so comprehensive and exact that it was placed in the permanent archives of National. They also have made a scrap book which covers the Woman's Auxiliary movement in Louisiana, both State and Parish. Mrs. Gessner's work, measured by any yardstick, is superb.

"I appointed Mrs. William P. Bordelon of Lake Charles, as Chairman of Exhibits, when we began definite plans for convention. Of course, all her work for that was discontinued, but she managed the Hygeia Exhibit at the P. T. A. Convention in Lake Charles, helping to 'inform' others of this magazine which is the pride of the A. M. A.

"Our Printing Chairman, Mrs. Broox C. Garrett, made inquiries about having a year-book printed for the Louisiana Auxiliary, but the Executive Committee advised against the expenditure of that money this year.

"Mrs. Wiley R. Buffington acted as Press and Publicity Chairman, working very diligently both with the New Orleans Medical and Surgical Journal and the National Press. Your press chairman works. And how she does measure up on the Magic Measure!

"I shall not attempt to measure the Parish Auxiliaries. I shall retell very briefly their activities as they told them to me in the annual reports.

"The Caddo Auxiliary (Shreveport), sponsors a school for the potentially tuberculous children at the Pines Preventorium. They furnish school supplies, clothes, and good times, doing follow-up work after the children leave the Preventorium. The Shreveport group also has a Medical Library Committee which works under supervision of the Shreveport Librarian. Mrs. L. M. Pirkle compiled a history of the Shreveport Auxiliary, giving authentic details, interesting personal glimpses and even using pictures. Mrs. William P. Yerger was president in Shreveport.

"Calcasieu Parish has the unique record of never having lost a member. Mrs. Thomas Henry Watkins was president this year. Their health work

is carried on under the supervision of a Public Health nurse. I have mentioned their splendid *Hygeia* work. They have done much philanthropic work, sewing, giving clothes, money, and food for the needy. Lake Charles worked all year with convention in mind, relating everything to that one happy event. Their plans were complete and perfect when it became necessary for the House of Delegates to dispense with the convention.

"Jefferson Davis Parish was organized this year. Mrs. F. W. Harrell of Jennings, is the president.

"Morehouse Parish has stressed fellowship among its members. Mrs. Rae B. Leavell was their president.

"Orleans has done much that is fine. Mrs. Isidore Cohn has been president. It is true that in New Orleans they have greater numbers and more opportunities than come to those of us in the country. But they also seem to work in the fine old spirit of 'noblesse oblige.' The Orleans Auxiliary has sponsored from 4 to 9 Social Hygiene lectures a month, co-operating with the Social Hygiene Association of New Orleans. They had a bridge party and cake sale which netted \$145.00 for the *Hygeia* Fund. They sewed for the Red Cross. They served in the volunteer emergency motor corps organized by the mayor, driving social workers on their rounds so time could be saved. They furnished and delivered food to three clinics once a week for the mothers of new-born babies. They also have a Commemoration Fund, established to memorialize a member or a loved one, a special joy or special sorrow.

"Ouachita Parish meets at luncheon followed by business and program. They seem blessed with an acute civic consciousness, co-operating with Red Cross, Salvation Army, P. T. A., Anti-Tuberculosis League. They did much with *Hygeia*, too. Their social activities were interesting and numerous. Mrs. J. Byron Vaughan served as president until February, when Mrs. J. E. Walsworth assumed the duties.

"Webster Parish meets quarterly, having dinner with their husbands and then a separate business and program session. Their's is co-operative and welfare work. There is a fine esprit de corps in Webster Parish. Mrs. Samuel M. Richardson was their president. W, ends my alphabet of parishes.

"In the beginning I asked the parishes to appoint chairmen corresponding to state and national, feeling that was the best way for us to become 'informed'. Until those chairmen have been appointed and they have contacted state and national chairmen, we do not know whether we want them or need them. In most parishes the presidents were glad to do it. I also made a definite appeal for the establishment in each parish of a definite fiscal year. All but one co-operated.

"Our membership file is complete except for one parish. Our Corresponding Secretary, Mrs. Charles R. Gowen, labored long over the state file. I compiled a file of state officers, chairmen, and parish presidents from the beginning of the auxiliary in Louisiana to hand over to my successor.

"Another plea I made was for Parish Advisory Councils, and every parish has one.

"It was my very great pleasure to attend the meeting of the Woman's Auxiliary to the American Medical Association in New Orleans, to sit in the seats of the mighty, and even to stand right up in meeting and second a motion. I am afraid the national meeting left me in an 'and did you once see Shelley plains?' daze, but it was fine throughout the year to feel that our work was guided by such magnificent leaders, and their strength never failed me. Another reason why I feel each parish must contact our national committees.

"Here I say in futile words the heartbreak and dismay Louisiana felt upon the death of our well beloved President, Mrs. Walter Jackson Freeman. She was, I believe, the woman of the most scintillating intellect, the deepest understanding, the kindest heart and the wittiest pen that it has ever been my happiness to know. Her memory must serve us as a 'Sign of cloud by day and a sign of fire by night' in carrying on our Auxiliary program, which was, I believe, her heart's dearest wish. How brilliantly and fully Mrs. Percy has carried on the work as president, every auxiliary member knows. How difficult it has been and how much she has sacrificed for it, no one knows, for Mrs. Percy's has been the sort of gallantry that is decorated in terms of 'beyond the call of duty.'

"When I was unable to attend the Southern meeting, Mrs. Chaille Jamison acted as my representative, reading our report, and presenting our state's gift to Mrs. Arthur Herold when she became Southern President.

"As you know, the business obligatory upon this administration was transacted in three Executive Board sessions, the last two transacting the business of convention after I was notified the House of Delegates had dispensed with the State Convention. The amendment referred to solved the unusual problem. The board instructed me to ask the parish presidents for nominations for a president-elect. Those sealed nominations were opened at the last board meeting. After the board vote was canvassed, the tellers reported that Mrs. Thomas Henry Watkins of Lake Charles, had been elected President-elect to assume the office of president of the Louisiana Auxiliary in 1934, succeeding Mrs. John H. Musser of New Orleans. Mrs. Watkins has twice been president of the Calcasieu Auxiliary, both times being years when Lake Charles expected to entertain the state convention. She is so capable, so well 'informed', so charming, and so amaz-

ingly energetic and efficient that I am happy indeed, to report her acceptance of the nomination.

"Very humbly I am starting a fund which, for want of a better name, I call the 'President's Discretionary Fund'. I am hoping Mrs. Musser will use it as far as it will help her in visiting parish auxiliaries. I am hoping, too, that each parish will invite her to visit during the year. If you knew Mrs. Musser you would make a date right now. She will bring to you, not only the wisdom of her counsel, but the glory of her smile and the fun of her happy, happy heart.

"I cannot possibly express my gratitude to the many people who have done so much to make our year together happy, successful, and 'informed.' I must mention though, my Executive Board, and give the members a few words of my deep appreciation of their efforts, their constant encouragement, and their amazing courage in the face of such obstacles as only 1932-33 could present. If I were in funds, or if I were Walter Winchell, I would send each of you orchids for breakfast every day in the week except Sunday, and on Sunday I would send you a new hat. To the National Board who never failed to inspire and to give practical advice, I am grateful. To Southern, for its constructive projects, I am grateful. To the daily press and to the New Orleans Medical and Surgical Journal and to the Tri-State Medical Journal for space so generously given, I am grateful. To Dr. Roy Harrison, President of the Louisiana Medical Society, and to Dr. Talbot, the Secretary, I am grateful for many replies to queries I made, and for their charming courtesy and real help. To my gentle husband for his always patient if not inspiring 'Uh-huhs'. To my very own jolly wee wunks for not having had mumps (they had everything else). To Mrs. T. H. Watkins, Convention Chairman, and to every member of the Auxiliary in Lake Charles, for their careful plans for a delightful convention, my gratitude and my sympathy in their disappointment. They and I shall always know there would have been one perfect convention.

"I am glad for the year's work—even with all its disappointments. It is you who have made it happy. Circumstances only seemed to vent a little too much spleen. We are not a fair weather organization. We have courage and health and faith in the Louisiana State Medical Society. Even now, looking at the year, I say with Emerson, it 'globes itself into a drop of dew.'

"Now, let me make a few recommendations:

"Please answer communications. It is maddening to write perfectly sane letters on good stationery using three-cent stamps and have them received in silence. I can't tell by correspondence whether it is a stony silence or the silence of the void, but it comes in my president's category of 'last straws.' Answer—something.

"I strongly recommend the adoption of a state project. We need something to bind us more closely in Louisiana.

"Press and Publicity I believe should be better organized. I should like to see each auxiliary with a correspondent to the New Orleans Medical and Surgical Journal and the Tri-State Medical Journal, as well as the local press. Send in the actual work and accomplishments. Read Mrs. Freeman's message on that. Don't despair of finding the Auxiliary notes in the New Orleans Journal. They are there. Maybe when we have more, our section will be indicated somehow in the table of contents.

"I recommend amending the section of the Constitution providing for the nominating committee. I should like to see the same method used in Louisiana as is now used by national. True, a change may lead to politics, but that might be as satisfactory as the 'who-is-the-lady-in-the-red-hat?' method.

"The Hand-book is so useful that I urge each parish to buy several for the committees and officers.

"A President-elect in each auxiliary would help to unify aims and plans.

"I should like to see each parish have its annual meeting in January or February. That way the year's work would dovetail nicely with the state which has convention in April as a rule, and dovetails nicely with national convention in June. It would simplify the matter of annual reports immensely. Besides that, your program committee would be working during the fall when activity is stimulating and not in the hot summer when a quorum is difficult.

"Finally, and with all my heart, I recommend 'an informed auxiliary, both active and potential'. Remember, 'It is not the individual nor the army as a whole, but the everlastin' team work of every bloomin' soul.'

"Respectfully submitted,

"Mrs. Robert Theodore Lucas,
"President, Woman's Auxiliary to Louisiana State Medical Society 1932-33."

Mrs. Wiley R. Buffington,
Chairman, Press and Publicity.

MISSISSIPPI STATE MEDICAL ASSOCIATION NEWS

OFFICERS 1933-1934

President—J. W. D. Dicks, Natchez.

President-Elect—E. C. Parker, Gulfport.

Vice-President—E. R. Nobles, Rosedale; J. A. K. Birchett, Jr., Vicksburg; C. C. Hightower, Hattiesburg.

Treasurer—E. L. Wilkins, Clarksdale. (Re-elected).

Secretary—T. M. Dye, Clarksdale. (Re-elected).

Speaker of the House—J. P. Wall, Jackson. (Re-elected).

Historian—E. F. Howard, Vicksburg. (Re-elected).

Editor—L. S. Lippincott, Vicksburg. (Re-elected).

Associate Editors—D. W. Jones, Jackson; J. S. Ullman, Natchez. (Re-elected).

Councilor 1st District—J. W. Lucas, Moorhead.

Councilor 2nd District—L. L. Minor, Route 4, Memphis.

Councilor 3rd District—M. W. Robertson, Corinth.

Councilor 4th District—T. J. Brown, Grenada.

Councilor 5th District—W. H. Watson, Pella-hatchie.

Councilor 6th District—H. Lowry Rush, Meridian.

Councilor 7th District—Joe E. Green, Laurel (Re-elected).

Councilor 8th District—W. H. Frizell, Brookhaven (Re-elected).

Councilor 9th District—D. J. Williams, Gulfport (Re-elected).

Delegates to the American Medical Association—J. M. Acker, Jr., Aberdeen; H. A. Gamble, Greenville (Re-elected).

Committee on Budget and Finance—S. E. Eason, New Albany; W. L. Little, Wesson; D. C. Montgomery, Greenville. (Re-elected).

RESUME OF THE MINUTES OF THE THIRTIETH ANNUAL SESSION OF THE HOUSE OF DELEGATES MISSISSIPPI STATE MEDICAL ASSOCIATION JACKSON, MAY 9, 10, 11, 1933

Called to order May 9, at 8 A. M., by President J. M. Acker, Jr.

Invocation by E. F. Howard.

Speaker J. P. Wall assumed the chair.

Roll call showed 45 officers and delegates present.

The secretary presented his financial report and the treasurer presented his report. Referred to the Committee on Budget and Finance.

Report of historian read and adopted.

Report of publication committee read and adopted.

The president delivered a short address, and introduced the president-elect, who also addressed the House.

Report of committee on public policy and legislation read and adopted.

Report of committee on constitution and by-laws read and action postponed until the next meeting of the House.

Roll call showed 74 officers and delegates present.

Dr. J. A. K. Birchett, Jr., for the Issaquena-Sharkey-Warren Counties Medical Society, proposed an amendment to Chapter IX, Section 1, of the by-laws, providing for election of committees. Tabled until next meeting of House.

J. A. K. Birchett, Jr., for the Issaquena-Sharkey-Warren Counties Medical Society, presented a draft of a proposed lien law for the protection of physicians, nurses and hospitals. Referred to the committee on public policy and legislation for presentation to the next legislature.

J. A. K. Birchett, Jr., for the Issaquena-Sharkey-Warren Counties Medical Society, presented a proposed law for the protection of legally licensed physicians. This law had been presented to the last legislature and passed with numerous amendments. Referred to the Committee on public policy and legislation for presentation to the next legislature in its original form.

J. A. K. Birchett, Jr., for the Issaquena-Sharkey-Warren Counties Medical Society, presented resolutions calling for the legalization of 3.2 per cent beer and to allow physicians to prescribe spiritous liquors in accordance with Federal law. Resolutions tabled.

L. B. Otken, for the Delta Medical Society, presented a resolution calling for a basic science law. Resolution tabled.

L. B. Otken, for the Delta Medical Society, presented a resolution calling for a curtailment of the activities of the State Board of Health in giving serums and toxins to other than indigent persons. Resolution tabled.

L. B. Otken, for the Delta Medical Society, presented a resolution calling for the abolition of the privilege tax on physicians, including the sales income tax and the tax on equipment. Resolution referred to the committee on public policy and legislation.

A nominating committee was selected as follows: First Councilor District, L. B. Otken; Second Councilor District, S. E. Eason; Third Councilor District, V. B. Philpot; Fourth Councilor District, R. A. Clanton; Fifth Councilor District, J. W. Barksdale; Sixth Councilor District, M. J. L. Hoyer; Seventh Councilor District, B. T. Robinson; Eighth Councilor District, A. B. Harvey; Ninth Councilor District, W. A. Dearman.

G. S. Bryan for the Northeast Mississippi Thir-

teen Counties Medical Society, nominated for honorary membership W. C. Spencer and W. V. Saul. Elected.

G. F. Carroll, for the Harrison-Stone-Hancock Counties Medical Society, nominated for honorary membership W. W. Eley. Elected.

An amendment to Article III, of the constitution, having to do with component societies, and presented at the last session, was read and adopted.

An amendment to Article IV, Section 3, of the constitution, having to do with guests, and presented at the last session, was read and adopted.

An amendment to Article IV, Section 4, of the constitution, having to do with honorary membership, and presented at the last session, was read. An amendment to the amendment to make 10 years of membership instead of 20 years a prerequisite for honorary membership and providing for the approval of the Council, proposed by E. F. Howard, was adopted. The amendment as amended was then adopted.

An amendment to Article V, Section 2, of the constitution, having to do with authority to change the place of meeting, and presented at the last session, was read and adopted.

An amendment to Article VI, Section 2, of the constitution, having to do with the terms of office of the officers of the association, and presented at the last session, was read and adopted.

An amendment to Article VII, of the constitution, having to do with composition of the House of delegates, and presented at the last session, was read and adopted.

The secretary read a message from J. C. Culley regretting absence.

On motion of W. H. Frizell, the members stood in respect for the sorrows of Dr. and Mrs. Henry Boswell.

H. A. Gamble, delegate to the American Medical Association, presented a report which was received.

E. F. Howard offered an amendment to Chapter II, Section 2, of the by-laws to conform to Article V., Section 2, of the constitution as amended at this session. Tabled until next meeting of the House.

L. W. Brock presented resolutions adopted by the Mississippi State Hospital Association and extending greetings to this Association.

Adjourned to meet after last scientific session.

Called to order by Speaker J. P. Wall at 12:10 P. M., May 11.

Roll call showed 69 officers and delegates present.

Inasmuch as the section on medicine had not elected a chairman this year, on motion of W. H. Frizell, the incoming president was authorized to appoint a chairman for this section.

The speaker read a telegram from W. H. Anderson advising of the death of his mother. On mo-

tion of S. E. Eason, the secretary was instructed to send a telegram of condolence to Dr. Anderson.

The speaker read a letter from Miss Rena Humphreys, state librarian, requesting copies of the Transactions of the association.

On motion of H. F. Garrison, the secretary was instructed to send a telegram of sympathy to H. F. Shands at the sanatorium.

The proposed amendment to Chapter II, Section 2, of the by-laws was read and adopted.

The proposed amendment to Chapter IX, Section 1, of the by-laws was read. E. F. Howard offered an amendment to the proposed amendment to add "except as otherwise provided by the constitution and by-laws," and it was adopted. The amendment as amended was then adopted.

The following amendments to the by-laws presented at the meeting on May 9, were read and action taken as follows:

Chapter 7, Section 2.—Adopted.

Chapter 7, Section 3, providing that in the event of the death, resignation or removal, of the president, the president-elect shall become president. Adopted.

Chapter 7, Section 4.—Adopted.

Chapter 9, Section 2, providing that the committee on program shall consist of the secretary and the chairman of the various sections. Adopted.

Chapter 11, Having to do with contract practice. On motion of W. H. Frizell, action was deferred until the next annual session and the secretary directed to send copies of the proposed amendment to the secretaries of the component societies for study.

Report of committee on hospital legislation presented by E. R. Nobles, chairman. Received. On motion of L. S. Lippincott, committee was continued with instructions to present the bill proposed by the committee to the next Legislature and to work for its passage.

Report of budget and finance committee by D. C. Montgomery, chairman read and adopted.

Report of Council by W. H. Frizell, secretary, read and adopted.

E. F. Howard urged the aid of the members for the historian.

Resolutions having to do with the sales tax and privilege tax offered by F. J. Underwood. Adopted.

Resolution by W. H. Frizell that a vote of thanks be extended to the City of Jackson, Central Medical Society, to the managements of the hotels of the city, and to the press. Adopted.

E. F. Howard offered a resolution extending thanks to the speaker for the excellent manner in which he had presided. Adopted. Dr. Wall expressed his appreciation.

E. R. Nobles asked for suggestions and cooperation for the committee on community hospital legislation.

Natchez was selected as the place of meeting

for 1934. The report of the nominating committee was presented.

The reading of the minutes was dispensed with.

Officers for the year of 1933-1934 were elected.

(The above resume of the minutes is not complete but is a report of the meeting of the House of Delegates so far as available at time of going to press.—Editor.)

REPORTS OF OFFICERS SECOND COUNCILOR DISTRICT

In the second councilor district there are three medical organizations:

The North Mississippi Medical Society which is composed of members from seven counties as follows:

County	Members	Non-Members	Per cent of Members
Benton	2	3	40
Lafayette	10	6	62 Plus
Marshall	8	3	72 Plus
Panola	4	12	25
Tippah	6	7	46 Plus
Union	5	10	33-1/3
Yalobusha	8	7	53 Plus

This gives forty-three members and forty-eight non-members. The Society has one member from Leflore County, totaling forty-four members, with a percentage of members forty-nine per cent.

The DeSoto County Medical Society which has eight members and five non-members with sixty-two per cent of members.

The Tate County Society which has nine members and one non-member, with a percentage of members of ninety per cent.

On the whole, the societies in this district are doing good work. There has been no call on the medico-legal fund. Collections are far from what they should be, but we look forward with confidence. All of these societies meet quarterly with fair attendance and interest.

I have endeavored to keep in touch with matters in this district; we will continue to be diligent in our efforts.

L. L. Minor,
Councilor, Second District.

Route 4,
Memphis, Tenn.
May 8, 1933.

THIRD COUNCILOR DISTRICT

The district is composed of thirteen counties all is one society, the Northeast Mississippi Thirteen Counties Medical Society. Membership is 105 out of 180 eligibles. Loss in membership is due to the depression and not to any dissatisfaction. No suits were reported to the councilor. Meetings are

held quarterly at the different towns in the district by invitation. Meetings are well attended.

Respectfully submitted,

M. W. Robertson,

Councilor, Third District.

SEVENTH COUNCILOR DISTRICT

In submitting my report as councilor for the Seventh District permit me to say that in our District there has been a panic during the past twelve months and its fangs have been felt distinctly by the physicians.

There are two medical societies in the Seventh District. The South Mississippi Medical Society is composed of thirteen counties. Quarterly meetings are held each year and are always well attended by the doctors. We usually have from 45 to 75 doctors at each meeting. The program committee arranges attractive programs, beginning at three in the afternoon and ending at seven o'clock at night. There are only 60 paid up members so far. However, we hope to bring this number up to at least 85 during the year.

The Clark-Wayne Society is inactive as a society, yet many of the physicians in these two counties attend the meetings of the East Mississippi Medical Society and Meridian and the South Mississippi Medical Society. The doctors of Clark and Wayne Counties have expressed a desire for many years to abandon their local society, the Clark County physicians to go to Meridian and the Wayne County physicians to Hattiesburg and Laurel. I hope this can be perfected this year.

For several years I have been interested in local post graduate work which will be in the reach of the physicians of my district at a minimum cost. I am glad to report that sentiment is growing among the doctors to hold a two weeks' post graduate school in South Mississippi and Stafford Springs seems to be the most logical place for the meeting. This idea is not original with me, for many of you have attended the Southern Pediatric Seminar at Saluda, North Carolina, however, if we finally arrange for such meetings of post graduate work, it will be the general course and not limited to pediatrics. I have contacted a large number of leading specialists and with one exception they all stated that they would be glad to give their services on the staff. Dr. E. M. Gavin, who is a member of our association, is now in charge of Stafford Springs and assures me that he will co-operate in every possible way to hold the expenses down for board and other incidental expenses while the doctors are there. I hope the physicians will think it over and if we succeed in trying out this experiment, will make their plans to attend.

The usual large number of deaths over the State has been with us and it is high time that we doctors demand the same chance to live that our pa-

tients take, and quit working ourselves to death on a credit. Dr. R. H. Cranford, President-Elect of South Mississippi Medical Society has been confined to the hospital several weeks in New Orleans and is now on the coast recuperating and although we miss him today we sincerely hope he will eventually regain his health and again be with us.

One damage suit was reported in the South Mississippi Medical Society. Dr. V. B. Martin, of Picayune was sued by a former patient. Dr. Martin won this case.

Respectfully submitted,
Jos. E. Green,
Councilor, Seventh District.

NINTH COUNCILOR DISTRICT

During the past year there has been no change in the organization of the county medical societies or their time of meeting. Each of the two societies in the District have held regular meetings with an average good attendance and with regular programs. The membership for the Harrison-Stone-Hancock Counties Medical Society has slightly fallen off and the fraternal feelings among the doctors continue good.

Respectfully,
D. J. Williams,
Councilor, Ninth District.

REPORT OF THE PUBLICATION COMMITTEE

To the President, Speaker and House of Delegates of the Mississippi State Medical Association:

In the 13 months since the last meeting of the Association, your Committee on Publication has continued its efforts to make Mississippi's part of the New Orleans Medical and Surgical Journal, our official organ, worthy of the ideals of this Association, and of the greatest possible interest to the greatest number of our members.

This Association shares its Journal with the Louisiana State Medical Society and the Orleans Parish Medical Society. An analysis of the material published in the Journal in the year of 1932, as furnished by the Editor-in-Chief, shows the following:

Number of Scientific Articles: Louisiana State Medical Society, 33; Mississippi State Medical Association, 34; Orleans Parish Medical Society, 25; Miscellaneous, 6.—Total 98.

Scientific Pages: Louisiana State Medical Society, 195; Mississippi State Medical Association, 201; Orleans Parish Medical Society, 120; Miscellaneous, 18.—Total 534.

Hospital Staff Transactions and Clinical Suggestions: Louisiana State Medical Society, 31; Mississippi State Medical Association, 32; Miscellaneous, 25.—Total 88.

News Pages: Louisiana State Medical Society,

65; Mississippi State Medical Association, 178-1/2; Orleans Parish Medical Society, 18-1/2.—Total, 262.

It will be noted that very few papers from sources outside of the three official organizations which the Journal represents were published. This was done to conserve space. Our Journal, as all other medical journals and all other magazines as well, has had its income materially cut in the last few years from loss of advertising. As a matter of fact, the New Orleans Medical and Surgical Journal has not met expenses in the last year.

Under the circumstances, we feel that the analysis of material published shows the Journal to have been most generous to our Association. While not as many papers from component county societies have been published as we might desire, all papers from our state association have been printed, and we have shared the space devoted to "miscellaneous" essays, which includes county society papers.

Again we wish to urge the secretaries of county societies to use discrimination and judgment in selecting papers for publication. Many papers that bring about worthwhile discussions in local society meetings can not be classed as real contributions to scientific medicine. Many papers are not the result of original work performed by the author or work done to prove or disprove theory or practice. Such papers would not be generally read if published and should not be submitted.

This does not mean that we cannot and do not wish to publish papers of real merit, but materials for publication must be chosen with a view to greatest interest and value. This rule works to the honor of the author whose contribution is published.

It has been our hope that sometime we could have a section of our Journal in which could be published abstracts of all papers read before county societies. This would require additional space and considerable time in preparation but would give our association monthly an idea of the thought of its component societies. Perhaps in the happy days to come, this may be possible. It is the belief of your committee that it would be an interesting feature of our Journal.

And while considering the desirability of additional space, it would be well to remember that additional advertising would assure such space and that every member of this Association can effectively aid in securing advertising. It is only right that business houses that sell supplies to the doctors of Mississippi should support those doctors by advertising in their official Journal. If every member of this Association would insist on this one point, we would soon have all of the space desired. Your committee urges that from now on you purchase your supplies from such business organizations as use our Journal for advertising and that you explain to others who do not now advertise

your reasons for buying elsewhere. Your Journal will be better for your cooperation.

This year for the first time we are able to report a Board of County Editors representing all of the 82 counties of our state. It is through their active assistance that the section of Mississippi News has been possible. The following comprise the present board by counties and the numbers after the names indicate the number of times in the last 13 months that items have been received and the percentage rating of activity for each county. Where a star is placed after the name of an editor, it indicates that he has served less than the 13 months.

County	Editor	No. of Items	Pct. of Act.
Adams	L. Wallin	10	76.9
Alcorn	J. R. Hill*	6	46.2
Amite	P. J. Jackson	1	7.7
Attala	C. A. Pender	2	15.4
Benton	F. Ferrell	0	0.0
Bolivar	C. W. Patterson	4	30.8
	H. L. Cockerham*	0	0.0
Calhoun	W. J. Aycock*	1	7.7
Carroll	J. P. T. Stephens	0	0.0
Chickasaw	W. C. Walker*	0	0.0
Choctaw	J. James	4	30.8
Claiborne	W. N. Jenkins	2	15.4
Clarke	B. F. Hand*	0	0.0
Clay	S. R. Deanes*	3	23.7
Coahoma	A. C. Everett*	0	0.0
Copiah	W. L. Little	2	15.4
Covington	D. T. Allred*	0	0.0
De Soto	L. L. Minor*	4	30.8
Forest	C. C. Buchanan*	3	30.8
Franklin	C. E. Mullins	0	0.0
George	R. F. Ratliffe*	0	0.0
Green	A. Graham*	0	0.0
Grenada	T. J. Brown	7	53.8
Hancock	D. H. Ward*	2	15.4
Harrison	G. F. Carroll*	4	30.8
Hinds	W. F. Hand*	10	76.9
Holmes	R. C. Elmore	5	38.5
Humphreys	G. M. Barnes	1	7.6
Issaquena	W. H. Scudder	6	46.2
Ittawamba	S. L. Nabors*	0	0.0
Jackson	S. B. McIlwain	11	84.6
Jasper	J. B. Thigpen*	2	15.4
Jefferson	R. B. Harper	0	0.0
Jefferson Davis	G. C. Terrell*	1	7.6
Jones	J. E. Green*	3	23.7
Kemper	A. M. McCarthy*	4	30.8
Lafayette	E. S. Bramlett	1	7.6
Lamar	L. L. Polk*	1	7.6
Lauderdale	C. T. Burt	4	30.8
Lawrence	B. S. Waller	2	15.4
Leake	I. A. Chadwick	1	7.6
Lee	R. B. Caldwell*	1	7.6
Leflore	W. B. Dickens	13	100.0
Lincoln	W. H. Frizell	4	30.8
Lowndes	J. W. Lipscomb	4	30.8
Madison	Robert Smith*	1	7.6
Marion	J. G. Gardner*	1	7.6
Marshall	D. R. Moore	1	7.6
Monroe	G. S. Bryan	13	100.0
Montgomery	J. O. Ringold	2	15.4
Neshoba	W. R. Hand*	4	30.8
Newton	S. A. Majure	0	0.0
Noxubee	E. M. Murphy	4	30.8
Oktibbeha	J. F. Eckford*	1	7.6
Panola	G. H. Wood	3	23.7
Pearl River	G. E. Godman*	4	30.8
Perry	B. T. Robinson*	0	0.0
Pike	T. Paul Haney, Jr.	4	30.8
Pontotoc	R. P. Donaldson	13	100.0
Prentiss	R. B. Cunningham	9	69.2
Quitman	E. A. McVey*	4	30.8
Rankin	W. H. Watson*	0	0.0
Scott	W. C. Anderson	0	0.0
Sharkey	W. C. Pool	7	53.8
Simpson	S. F. Strain	1	
	E. L. Walker	7	61.5
Smith	R. B. Boykin*	0	0.0
Stone	S. E. Dunlap	0	0.0
Sunflower	G. J. Mancill*	0	0.0
Tallahatchie	T. F. Clay*	2	15.4
	J. E. Powell*	0	
	J. W. Moody	2	15.4
Tate	W. D. Smith	1	7.6
Tippah	C. M. Murry	4	30.8
Tishomingo	T. P. Haney*	2	15.4
Tunica	M. B. Jernberg*	0	0.0
Union	H. P. Boswell	2	15.4
Walthall	B. L. Crawford	0	0.0
Warren	N. B. Lewis*	5	38.5
Washington	John G. Archer*	9	69.2
Wayne	W. P. Gray*	0	0.0
Webster	W. H. Curry	4	30.8
Wilkinson	S. E. Field	6	46.2
Winston	M. L. Montgomery	13	100.0
Yalobusha	G. A. Brown	2	15.4
Yazzo	C. M. Coker	4	30.8

It is again urged that hospitals send in abstracts of interesting case histories presented at staff meetings. If a case is worth reporting to a hospital staff, it is also of interest to other hospital people and to physicians in general who do not have the advantage of hospital staff membership.

This year most of the reports of officers and committees to be presented at this meeting have been published in the convention number of our Journal. It is the belief of your committee that the members of the Association and especially the delegates are entitled to see these reports in advance in order that they may give thought to the affairs of the Association. The same applies to resolutions and matters of business to be presented at the annual meeting. Hasty judgement brings

regret. Mature consideration brings wisdom. Controversial subjects having to do with medicine should be freely discussed throughout the year.

Your committee wishes to express its sincere thanks to the many members of the Association and to the Women's Auxiliary for their contributions during the past year; to the editor-in-chief and the business manager of our Journal for their many courtesies. The New Orleans Medical and Surgical Journal is your official publication. It should express your ideals of organized medicine. Your publication committee is always in a receptive mood.

Respectfully submitted,

Leon S. Lippincott
J. S. Ullman
D. W. Jones

WAKE UP

Of all the good things put before us at our recent meeting, the matter of most general importance was Dr. Christie's address on the Report of the Committee on the Costs of Medical Care. It was a sad commentary on the lack of alertness of Mississippi doctors that the attendance was so small and that the members who took part in the discussion showed so little familiarity with the subject.

This report is a direct bid for state medicine. What are we going to do about it? We may either assume that, as the report was not made directly to the medical profession, we need do nothing but hide our heads in the sand, in which event we will get all the punishment that we deserve. Or we may take charge of the situation and force an adjustment equitable both to ourselves and the public. It is distinctly up to the medical profession to decide the matter and we may rest assured that if it does not, someone else will, in which event a general system of contract practice or state medicine, either of which will be under lay control, is assured.

There are just three courses left open to us—do nothing and let the matter be settled for us, institute our own system of state medicine, or refuse utterly to have anything to do with any form of contract practice or state medicine.

If we take the first course, our present method, we will be gradually borne down by the encroachments of contract practice, until eventually we will be in no position to fight anything and will be compelled to accept whatever is offered. Let's not deceive ourselves. This course has been the usual one in practically every country where state medicine exists today—the doctors have been starved into submission or desperation.

The second course, initiating our own system of state medicine and doing it while we are still in a position to fight, offers us some choice in the matter. We may not want to do it, but it would be

far better to make the fight now, while there is still some hope of real success, while our ranks are fairly solid, when the loyalty of our men is high and when we can choose our own battle ground, rather than to wait until our ranks are shattered by the steady encroachments of contract practice and we are fighting with our backs to the wall.

The third course, to refuse all lay and state interference between ourselves and our patients, is still open to us; but if we are to take this position we must first clean house. We must abandon our present unethical contracts and all stand alike. The railroad surgeon or the medical employee of any other corporation who receives a flat fee for attending groups of patients, who each contribute a small sum to the employer—a part of which stays in his pocket, must realize such methods are as much in violation of the rules of fair competition as are those of the man who organizes a club and treats its members on the "dollar a month" basis. Both are on the same plane and it is the men who are doing practice of this sort who must clarify the situation. If we are to avoid state medicine we must clean house.

And, since the cost of medical care includes hospitalization the Hospital Association must do its part. Hospital fees, like doctors' fees, must be on a sliding scale. This will call for a difference in service rendered. Well and good. The man of moderate means lives in a less expensive house, wears less expensive clothes, eats cheaper food, rides in a cheaper car than does the more fortunate neighbor. It is useless to say that when he gets sick he demands the best. We have educated him to do it. The answer is up to us, and if we do not give it the community hospital will, and that will be the end of privately owned hospitals.

The consideration of these matters cannot be indefinitely postponed. It is distinctly urgent, for the profession is getting weaker in this regard every day. The handwriting on the wall stands out clearly and we do not need a prophet to make the interpretation for us.

What are we going to do about it?

E. F. Howard.

Vicksburg,

May 12, 1933.

MISSISSIPPI STATE HOSPITAL ASSOCIATION

The fourth annual meeting of the Mississippi State Hospital Association was held at the Edwards Hotel, Jackson, Mississippi, May 8.

A program of general interest to the hospitals of the State was carried out during the day. Distinguished visitors included Dr. J. M. Acker, Jr., Aberdeen, President of the Mississippi State Medical Association; Dr. Bert W. Caldwell, Chicago, Executive Secretary of the American Hospital Association; Rt. Rev. Monsignor J. P. Fisher, Little Rock,

Arkansas, President of the Arkansas State Hospital Association; Father Gregory H. Keller, Pine Bluff, Arkansas; and Dr. B. P. MacLean, New Orleans, President-elect of the Louisiana State Hospital Association, and Mrs. MacLean.

The Association went on record as favoring legislative action for state aid to the indigent sick in the hospitals as recommended by the committee of the Mississippi State Medical Association on Community Hospital Legislation.

To foster closer relations, the Mississippi State Nurses Association was invited to exchange official representatives at the meetings of the two associations.

It was voted to invite the State Hospital Associations of Alabama, Arkansas, Kentucky, Louisiana, and Tennessee to meet with the Mississippi State Hospital Association in joint session at Natchez in 1934.

Officers for the year of 1933-34 were elected as follows: President—Dr. R. J. Field, Centreville; Vice-President—Dr. V. B. Philpot, Houston; Secretary-Treasurer—Dr. L. S. Lippincott, Vicksburg; Board of Directors—Dr. R. J. Field; Dr. V. B. Philpot; Dr. Leon S. Lippincott; Dr. J. Gould Gardner; Columbia; Mr. G. D. Stanley, Greenville.

The Secretary's report showed 48 institutional active members and seven personal active members. The registration was the largest in the history of the Association, being 124.

At the annual banquet in the evening, Dr. J. Gould Gardner, Columbia, President, presided as toastmaster. The principal address was made by Dr. Bert W. Caldwell. Other speakers included Dr. W. A. Evans, Chicago, introduced by Dr. F. J. Underwood, Jackson; and Lieutenant Governor Dennis Murphree, introduced by Dr. V. B. Philpot. Dr. J. M. Acker, Jr. introduced the new president, Dr. R. J. Field.

The next meeting of the Association will be held in Natchez, Mississippi, on May 7, 1934, in conjunction with the meeting of the Mississippi State Medical Association.

EAST MISSISSIPPI MEDICAL SOCIETY

The regular bi-monthly meeting of the East Mississippi Medical Society was held on the mezzanine floor of the Lamar Hotel, Meridian, Thursday, April 20. Dr. Dudley Stennis, president, presided. Thirty-nine regular members and eleven guests were present.

A report was made by Dr. H. L. Arnold, committee member, announcing the meeting of the Medical Institute to be held in the Lamar Hotel, Meridian, Tuesday, June 6 to Friday, June 9, inclusive and sponsored by the East Mississippi Medical Society.

Dr. T. A. Strain brought up the question of physicians' privilege tax payment and through his

suggestion, Henry Shotts, Meridian lawyer, came before the society, read and explained the law concerning privilege tax payment.

A motion was made by Dr. I. W. Cooper that we go on record as being opposed to the physicians' privilege tax, and that representatives from our district be requested to use their influence against the privilege tax which we now have to pay. It was suggested by Dr. H. L. Arnold that we add the physicians' sales tax to this. The motion was discussed but never came to a vote. On motion by Dr. A. C. Bryan it was voted that the East Mississippi Medical Society stand behind one member refusing to pay his privilege tax, provided the lawyers would take care of the legal side of the matter. A motion made by Dr. M. L. McKinnon was passed, providing that our delegates to the meeting of the State Medical Association on May 9, 10 and 11 bring the matter of privilege and sales taxes before the association for consideration. On suggestion by Dr. A. C. Bryan the secretary was requested to notify the component societies. Dr. A. M. McCarthy explained that elimination of the privilege tax automatically eliminated the sales tax. A motion made by Dr. T. A. Strain was passed providing that one member be appointed to serve for a test case, refusing to pay his privilege tax. Dr. Strain was appointed.

Dr. H. L. Rush announced that a petition had been signed by the necessary majority of the Kemper County physicians requesting the state association to allow them to join with the East Mississippi Medical Society. A motion was introduced by Dr. I. W. Cooper and passed that we ask Kemper County physicians to unite with us and that Dr. H. L. Rush, as councilor from this district, be requested to make application to the state medical association at the May meeting for its consideration and approval.

A motion was made by Dr. I. W. Cooper that Dr. M. J. Lowry and Dr. H. S. Gully be made honorary members on account of their many years of faithful service to the society and their contributions to medical science. Dr. Lowry was applauded when he insisted on explaining that he had rather remain a regular member and continue to pay his dues. Dr. Gully was not present, Dr. Cooper withdrew the motion.

The scientific program rendered was as follows:

Trauma to Fetus with Results to Child.—Dr. W. H. Banks, Philadelphia.

Discussed by Drs. W. J. Anderson and R. J. Wilson.

Acute Abdomen.—Dr. K. T. Klein, Meridian.

Discussed by Drs. H. L. Rush and M. L. Flynt.

Diphtheria and Vincent's Angina; Differential Diagnosis.—Dr. Homer Dupuy, ear, nose and throat specialist of New Orleans, La.

Discussed by Drs. H. L. Arnold, W. H. Banks, and Leonard Hart.

The next meeting will be held during the time of the Medical Institute which is to be held in the Lamar Hotel, Meridian, June 6 to 9, inclusive.

T. L. Bennett
Secretary.

Meridian,
May 1, 1933.

HARRISON-STONE-HANCOCK COUNTIES MEDICAL SOCIETY

May Meeting

Will be held at the King's Daughter's Hospital
Gulfport

Wednesday, May 3, 1933 at 7:30 P. M.

Subject—to be announced.

Also report of meeting with Board of Supervisors
in connection with R. F. C.

E. A. Trudeau,
Secretary-Treasurer.

Biloxi,
May 1, 1933.

COAHOMA COUNTY MEDICAL CLUB

The regular monthly meeting of the Coahoma County Medical Club was opened at 2:30 P. M. in the Council Chamber of the Clarksdale City Hall, Dr. T. G. Hughes, president, in the chair. The secretary failed to bring the minutes so they were dispensed with *pro tem*.

There being no old or new business to come before the Club, the program was next taken up.

Dr. W. H. Brandon read a paper entitled, "Functional Uterine Bleeding." A review of the literature on etiology with special reference to the endocrinology of the disease was well covered. The discrepancy of opinions of various authorities as to pathology and treatment was evident. The use of radium and surgery were discussed. The general opinion was that radium was dangerous and not efficient in less than dangerous dosage. Surgery was discouraged in the young and child bearing age. Treatment with pituitary and ovarian extract is considered the most efficacious at present.

Dr. I. W. Barret was unable to hold his clinic due to the fact that the patient did not appear. However, he did discuss "passive transfer" as practiced in allegry. Dr. Barrett warned against the use of asthmatic donors in making blood transfusions. The clinical use of the "passive transfer" is important where it is necessary to make skin tests on sick asthmatics but fear of reaction makes postponement necessary.

There being no further business, the Club adjourned *sine die*.

V. B. Harrison,
Secretary.

Clarksdale,
May 4, 1933.

DR. J. P. T. STEPHENS

Dr. J. P. T. Stephens died April 29, 1933, as the result of an automobile accident. He was born in Kosciusko, October 10, 1876. He attended the public schools and was graduated from Kosciusko High School. He then attended Millsaps College and was graduated from Tulane University in 1900. He began his practice in Zilpha, and eleven years later came to Vaiden where he has practiced since 1911.

Dr. Stephens did general practice in and around Vaiden. He was beloved and esteemed by the whole community. His activity in civic matters was a further manifestation of his love for his fellowman.

He was a member of the Winona District Medical Society, Mississippi State Medical Association, Southern Medical Association, American Medical Association, and Illinois Central R. R. Medical Society. He was local surgeon for the I. C. R. R., county health officer, and a member of the visiting staff of the Winona Infirmary. He was a Mason. He was a member of the Methodist Church.

He died in the line of service and a large gathering of friends from all walks of life who attended his funeral was an appropriate tribute of their love and affection for him.

"For to one is given by the Spirit . . . the gift of healing."

E. W. Holmes, Secretary,
Winona District Medical Society.

Durant,
May 6, 1933.

NEWTON INFIRMARY

Dr. M. L. Flynt has moved his family to Meridian this week, same consisting of Mrs. M. L. Flynt and Miss Irma Lee Flynt. They will later be joined by the two sons, Mayo and M. L. Jr., who are students at Tulane Medical College, New Orleans.

The Newton Infirmary will be represented at the Mississippi State Hospital Association meeting which convenes in Jackson, Monday, May 8th, by Dr. and Mrs. O. Simmons and Mrs. H. McMullan. Dr. Simmons will read a paper before that body, "Communicable Diseases in the General Hospital."

The Nurses Training School of Newton Infirmary was closed with the graduating exercises, May 2, at the Methodist Church, when Misses Bernice Horne, Doris Hays, Virginia Day, and Ruby Sullivan received their diplomas. The address was given by Rev. Wayne Alliston, Jackson. Dr. M. L. Flynt presented the diplomas stating that with this class the staff was discontinuing the training school and that the Newton Infirmary would have graduate nurses to serve the people hereafter. The exercises were well attended, a number of out of town doctors and guests being present.

Newton,
May 5, 1933.

Mrs. S. Kemp,
Secretary.

HINDS COUNTY

When this report goes to press the meeting of the State Medical Association will be history. We know that we are going to have a good time and that there will be a most interesting meeting. Those who do not come are going to forever regret it.

Dr. and Mrs. Oscar Eubanks of Crystal Springs are receiving congratulations on the arrival of a fine young son on Easter Sunday at the Baptist Hospital.

The Central Medical Society held its last meeting May 2 at the Robert E. Lee Hotel. A good crowd was present and the discussions were enjoyed by all. The guest speaker of the evening was Dr. V. B. Philpot, Houston, who read a paper on "The Treatment of Wounds." Dr. Philpot always presents a most interesting and instructive paper. We hope to be able to have him with us again in the near future.

The staff of the Jackson Infirmary held its meeting April 26. Besides the usual good meal, everyone thoroughly enjoyed the fine clinics, the outstanding part of the program.

The staff of the Baptist Hospital held its meeting April 18. A splendid program rendered, and the usual good meal enjoyed.

W. F. Hand,
County Editor.

Jackson,
April 5, 1933.

JACKSON COUNTY

The regular monthly meeting was held at the Jackson County Hospital May 11 at 7 P. M., with a good attendance and a very interesting meeting as some interesting cases were reported.

The stork visited the home of Dr. and Mrs. J. M. Lockard on April 21 and left them a fine little daughter, Catherine May.

S. B. McIlwain,
County Editor.

Pascagoula,
May 12, 1933.

LAFAYETTE COUNTY

I have little news from Lafayette County for the next issue. Most of our doctors are working hard and collecting little. As the fishing season is on, some of us relieve our depression psychosis with the rod and reel.

I believe that we will have a good representation in Jackson at the state medical next week.

The University will close in about three weeks. Our medical school is hanging in the balance. We are hoping that the Governor, Board of Trustees and Legislature will come to our rescue, and we will be able to continue our medical school indefinitely. I think that this can be brought about if

the physicians of Mississippi will get behind our medical school and say, "It shall not fall."

E. S. Bremlett,
County Editor.

Oxford,
May 6, 1933.

LEFLORE COUNTY

We deeply sympathize with Dr. C. J. Pittman of Ruleville in the loss of his wife, his mother, and his grandmother. His wife died at her home in Ruleville, very suddenly, on April 6. His mother died after a long illness at the home of her daughter, Mrs. W. M. Lloyd, of Greenwood on April 14, and his grandmother died in Florida on May 2, 1933.

Dr. W. M. Merritt of Boyle, Dr. R. C. Smith of Drew, and Dr. A. C. Lewis of Memphis attended the convention of the Sixteenth District of Rotary International at this place, May 2.

Dr. G. Y. Gillespie, Jr. will read a paper in the section on medicine of the Mississippi State Medical Association, May 9. The subject of his paper is "Neuronitis Complicating Pregnancy."

Dr. J. P. Kennedy has been asked to read a paper at the coming meeting of the West Tennessee Medical and Surgical Association at Shiloh Park, Tenn., on May 25. He has selected as his subject "Radium Therapy in the Treatment of Uterine Hemorrhage of Benign Origin."

Dr. and Mrs. George E. Hart of Inverness were recent visitors to Greenwood.

W. B. Dickins,
County Editor.

Greenwood,
May 9, 1933.

MONROE COUNTY

I know of no better way to celebrate May Day than by writing my monthly letter to the Journal. My slogan is "do your duty tho' the heavens fall." And since I have been drafted to report for Monroe County, I feel that it is my duty to my confreres that I make some kind of report.

None of our number has died since my last report and there is not a single man in our number, hence there is no death or marriage to chronicle. It has been so long since we have had a birth in one of our homes that such a thing would be a marvelous happening.

When I wrote last Dr. Burdine had just returned from a Memphis Hospital. A relapse of his condition required that he go back to hospital—this time he went to a local hospital. But I am glad to report that he is able to be back at home. We are hoping that it will be only a short time until he will be back to his normal physical condition. But his splendid wife has been quite unwell, too, during the last month. We hope that his improvement

will, by relief of her mind from anxiety about him, add greatly to her improvement.

The brilliant young daughter of Dr. B. C. Tubb, of Smythville, has been sick for some weeks too. This young lady is in her senior year at Millsaps College. It is only a few weeks now until she will be thru her work there. Then, I am sure, the rest that she can take will speedily restore her to her usual good health.

I have been made aware that a "new" doctor has honored Monroe County, by becoming a citizen of the county. He has taken up his habitat at Aberdeen. While I have not met him, I welcome him into our circle. He is, I am told, a grandson of one of Mississippi's grand old men—namely Dr. B. F. Ward who lived and died at Winona. There is nothing I could wish for his grandson that would be better than that he might emulate his famous grandfather and that he might some day have as many and as true friends as did his grandfather.

Farmers are late with their work in this locality. The weather has been unprecedentedly bad for farm work. But it is to be hoped it will be better soon. Things look a little brighter—cotton has, once more, crossed the eight cent line. Let us hope the "forgotten man" may be remembered in the "new deal" that seems to be imminent. Whether the man in the white house is able to save the day or not, he has *tried* and is still trying. He has undertaken the greatest task that any man has tackled in the history of our nation. By the emancipation of a few million black slaves who were unprepared for freedom, Lincoln has been cannonized. I do not grudge him an iota of the fame that has come to his name. But should the situation that been grappled by our hero be relieved, a greater emancipation will have been accomplished. Let us be charitable and helpful in every possible way, and thereby prove that we are worthy of the mind and heart that has been dedicated to the service of mankind.

I hope to see you and all my friends at Jackson, next week.

Until then, "So long."

G. S. Bryan,
County Editor.

Amory
May 1, 1933.

NOXUBEE COUNTY

I am enclosing a few news notes. Sorry I could not send more, but with so few doctors there isn't much going on.

Sorry too that I cannot be at the state meeting but am having trouble with my eyes and will have to be in Memphis tomorrow. Hope you may have a most interesting meeting.

Dr. C. G. Wright, who was formerly located in Brooksville, died in a hospital in Chicago recently

from diabetes mellitus and complicating diseases. Dr. Wright was a man of sterling character, a physician of unusual ability, a splendid citizen, and will be greatly missed by the community in which he lived.

Dr. S. F. Hill was called to Carrolton, Ala., recently to see a son of Judge Robison, who was taken to Birmingham for operation.

Dr. L. B. Morris accompanied his father to Memphis, Tenn., a few weeks ago for operation for cataract.

Dr. E. M. Murphey went to New Orleans recently on professional business.

E. M. Murphey,
County Editor.

Macon,
May 9, 1933.

PANOLA COUNTY

Panola county is fortunate is not having tornadoes, cyclones or epidemics of disease recently.

It is fortunate in being next to the lowest bonded indebtedness per capita county in the state.

It is fortunate in having some good work done by the State Board of Health in furnishing toxoid and vaccinating the school children against typhoid and the younger ones against diphtheria.

It is fortunate in having a marked reduction in physicians. Some years ago we had 24 or 25 physicians in the county; now we have 14 in regular practice and about two of these are very much on the decline physically. With easy access to hospitals few physicians are needed in the county.

On April 19 the ladies of Como put on a child's health clinic with Dr. Eugene Rosamond of Memphis as director, and he making the physical examinations. Dr. B. S. Guyton of Oxford examined eyes and ears. Dr. McCaa of Sardis examined teeth. A delightful luncheon was served the physicians at the home of Mrs. E. G. Taylor. Physicians present at luncheon and clinic: Dr. Eugene Rosamond, Memphis, Tenn.; Dr. B. S. Guyton, Oxford; Dr. John C. Cully, Oxford; Dr. J. M. Anderson, Sardis; Dr. E. L. Hooper, Como; Dr. E. H. Pasley, Como; Dr. A. P. Alexander, Como; Dr. H. R. Elliott, Batesville; Dr. G. H. Wood, county health officer, Batesville.

News gathering is a business in which I have had very little training. Will try to report more promptly.

G. H. Wood,
County Editor.

Batesville,
May 5, 1933.

PONTOTOC COUNTY

We are glad to report that Dr. W. H. Reid of Toccopola and Dr. E. G. Abernethy of Algoma are getting back in harness after their recent illness.

Several Pontotoc County physicians attended the staff meeting at Houston Hospital Thursday night of last week. Dr. Henry G. Hill of Memphis gave a very interesting lecture on fractures. Dr. Mull and Dr. Ward of University and Dr. James M. Acker, Jr., of Aberdeen made good talks also.

Dr. A. J. Stacy of Tupelo made us a pleasant visit yesterday.

Very little sickness in the county now.

Several of the doctors expect to attend the state medical meeting at Jackson next week.

Dr. L. B. Morris, wife and baby of Macon were recent visitors to our city.

R. P. Donaldson,
County Editor.

Pontotoc,
May 6, 1933.

SIMPSON COUNTY

Dr. and Mrs. W. W. Diamond, Magee, were Jackson visitors the first of the week.

The Magee Hospital, Magee, under the able management of Dr. W. W. Diamond, is doing a great work for this section of the county. Fourteen infants were delivered in the hospital during the month of April.

The cashier of the State Guaranty Bank, Magee, underwent an operation at the King's Daughters' Hospital, Brookhaven, last Tuesday. The operation was performed by Dr. Carroll W. Allen of New Orleans, La. Dr. S. F. Strain, Sanatorium, and Dr. E. L. Walker, Magee, were present for the operation.

Not long since a fetus of about three months and a full term infant were born to Mrs. H.—. I attended this case which was my first of its kind.

E. L. Walker,
County Editor.

Magee,
May 8, 1933.

WARREN COUNTY

Numerous Vicksburg doctors enjoyed the Mississippi State Hospital Association meeting held in Jackson this month.

Dr. Jack Birchett has returned from a pleasure trip to Chicago which was greatly enjoyed.

Dr. Preston S. Herring was seen among the visitors to Tallulah during the month.

A great number of cars with red crosses have been seen passing through Vicksburg enroute to Louisiana—why we do not know.

Dr. W. C. Pool of Cary, and Dr. G. W. Gaines of Tallulah, La., were visitors to Vicksburg recently.

Dr. George Street read a paper before the medical society at Lake Providence during the month. He was accompanied by Dr. R. A. Street, Jr.

Dr. Edley H. Jones and wife motored to Memphis on a pleasure trip.

Dr. Hugh H. Johnston has opened his office in the First National Bank Building, his practice being limited to eye, ear, nose and throat and plastic surgery.

Nathan B. Lewis,
County Editor.

Vicksburg,
May 10, 1933.

WASHINGTON COUNTY

The Delta Medical Society had a most successful meeting in Greenville, April 12. The attendance was record breaking, the program was exceptional and the entertainment unique.

We are glad to have Dr. H. A. Gamble back on the job again fully restored to health after a rest of about four months.

Dr. H. R. Miller attended the Annual Horse Show in Indianola. He had such a severe attack of asthma, being sensitive to horse dander, and was in such a critical condition that he had to be brought to the King's Daughters' Hospital at Greenville for treatment.

Dr. R. N. Crockett of Winterville is taking a special course in diseases of the heart at the University of Tennessee, Medical Department, Memphis, Tenn.

Dr. A. G. Payne, one of the executive councilors of the American Association for the Study of Goiter, assures us that there will be an excellent program at the annual meeting of this association in Memphis, May 15, 16 and 17.

Dr. J. A. Beals has enjoyed having as visitors in his home his father and mother, Mr. and Mrs. J. T. Beals and his grandmother, Mrs. A. H. Fodrea, all of Westfield, Ind.

Mrs. F. M. Acree has returned home from a pleasant visit to her mother and father, Mr. and Mrs. George W. McDonald at Waxahachie, Texas.

Dr. and Mrs. S. L. Lane of Hollandale are happy over the arrival of a fine little girl. This young lady was born at the King's Daughters' Hospital, Greenville, May 1. Congratulations, Dr. and Mrs. Lane.

Dr. R. D. Dickens, who was formerly connected with Gamble Brothers and Montgomery, Greenville, and who is now taking a special course in eye, ear, nose and throat at the Detroit Eye, Ear, Nose and Throat Hospital, writes glowing accounts of his work. All of Dr. Dickens' friends wish him great success in his new line of work.

The beautiful garden of Dr. and Mrs. D. C. Montgomery of Montbury, Greenville, will be the scene of an outstanding social event on May 25, when the wedding of their neice, Miss Margaret Bullington, and Mr. James Richard Walker of Memphis, Tenn. will take place.

The doctors of Washington County wish to ex-

tend their deepest sympathy to Dr. C. P. Thompson in the recent loss of his brother.

Dr. K. L. Witte of Leland has returned from a visit to his son, Benny, who is attending the University of Tennessee at Knoxville.

J. G. Archer,

Greenville,
May 6, 1933.

County Editor.

WILKINSON COUNTY

Doctors W. R. Brumfield, Paul Jackson and S. E. Field attended the regular meeting of the Homochitto Valley Medical Society last month. The Woman's Auxiliary had charge of the entertainment. The entire program was enjoyed very much.

Dr. R. J. Field made a business trip to Vicksburg on May 1.

Dr. and Mrs. C. E. Catchings will leave next week for a motor trip up through the Delta section visiting relatives.

Greetings to our past and new president. All thanks and appreciation to Dr. Acker for his interest and efforts. He certainly deserves credit for his work. We know that he is leaving his office in good hands with our good friend Dr. J. W. D. Dicks. With his ability and a little cooperation from the doctors we may well expect a successful year.

The regular Staff Meeting of Field Memorial Hospital was postponed from May 9 to later in the month because of the medical meeting in Jackson. Several of the staff attended the meeting.

S. E. Field,

County Editor.

Centreville,
May 10, 1933.

WINSTON COUNTY

We were glad to see the smiling face of Dr. C. A. Kirk from Fearnssprings, in our city this week. He is always full of hope and cheer.

Dr. E. L. Richardson, county health officer, has been on the sick list, but we are glad to see him out again.

Dr. W. W. Parks and his good lady spent last Sunday P. M. with their son-in-law and daughter at Philadelphia.

As lowering clouds and rumblings of distant thunder heralds an approaching storm, we hope our President Roosevelt's power will weather the tempest and that we will soon be normal again. Let us hope so with faith anyway.

The doctors of this community are very leisurely these days, as we are having but little illness.

We hope to attend the Mississippi Medical meeting next week, and be full of news for our next writing.

Louisville,
May 6, 1933.

M. L. Montgomery,

County Editor.

MISSISSIPPI STATE BOARD OF HEALTH

Dr. J. C. A. Ultee, Inspector of the Public Health Service, British West Indies, is in Mississippi for a two weeks' observation and study. Dr. Ultee was awarded a travel grant by the Rockefeller Foundation and come to Mississippi to study the program of the full-time county health departments. The Rockefeller Foundation is to assist in the inauguration of similar work in the British West Indies.

On May 29 and 30, there will be at Jackson the annual meeting of Mississippi public health nurses. An interesting and worthwhile program has been planned.

Dr. H. C. Ricks, director of county health work and epidemiology, Mississippi State Board of Health, has been given a travel grant by the Commonwealth Fund and will leave on May 15 for observation of the public health programs in the following places: Lansing and Detroit, Michigan; Albany and New York City, New York; Boston, Massachusetts; Washington, D. C.; and Montgomery and Tuscaloosa, Alabama.

Complete official statistics have revealed that Mississippi's 1932 death rate is the lowest ever recorded. Marriages in 1932 exceeded those of 1931, despite the financial crimp, and 1932 divorces were fewer than those of 1931. To complete the trinity, incomplete birth records for 1932 also indicate an increase over the previous year. Fewer deaths, more marriages, fewer divorces, and more babies! That is quite a record. Those physicians in Mississippi who with preventive medicine have integrated their general practice are due much credit for the lower death rate.

Jackson,

May 5, 1933.

F. J. Underwood,

Executive Officer.

EXAMINATION NOTICE

THE MISSISSIPPI STATE BOARD OF HEALTH
WILL HOLD EXAMINATIONS

For

LICENSE TO PRACTICE MEDICINE

JUNE 22 and JUNE 23, 1933

AT

THE NEW CAPITOL

JACKSON, MISSISSIPPI

Examination on first two years..... June 22

Bring or send Certificate for verification.

Examination on last two years..... June 23

Bring or send Diploma for verification.

Write for Application Blank

To

R. N. Whitfield, M. D., Assistant Secretary

WOMAN'S AUXILIARY

TO THE

MISSISSIPPI STATE MEDICAL ASSOCIATION

President—Mrs. F. L. Van Alstine, Jackson.

President-Elect—Mrs. Henry Boswell.

National Convention, Milwaukee, June 12-16, 1933.

Mrs. Leon S. Lippincott, Press and Publicity Chairman.

FROM OUR PRESIDENT

With a deep sense of the responsibility attending the presidency of this auxiliary, I have adopted the opportunity to serve you in this capacity, hopeful that the service I can give will help you to carry on the splendid record you have established.

There is much I do not know, much that I hope you will teach me. I need, and know that I need, your full undivided support and encouragement during the coming year.

The reports this year were splendid, increase in membership in all auxiliaries as well as the new ones organized; but most of all in the atmosphere of fellowship shown.

May I ask all to continue this membership campaign, under the leadership of your president-elect, who is organization chairman, for I feel that the fellowship we have and the new friends we discover each year through our organization is worth the effort we put into it; even if we observe nothing but our social work.

And I now ask your full cooperation for our press and publicity chairman, for it is through her columns and news letters that we will keep constant contact throughout the year, and feel we have had little friendly visits together.

Other suggestions will be made by the various chairmen of the committees as their plans are perfected.

Mrs. Frank L. Van Alstine,
President.

Jackson,
May 12, 1933.

HIGH LIGHTS ON THE STATE CONVENTION NEWS, 1933 JACKSON

Mrs. Arthur B. McGlothlan, St. Joseph, Missouri, immediate past president of the Woman's Auxiliary to the American Medical Association, was guest of honor and speaker at the state auxiliary meetings held in the Robert E. Lee Hotel, Jackson, May 9, 10, 11.

Dr. G. S. Bryan, Amory, was the speaker for the auxiliary on Wednesday morning.

Luncheon was enjoyed at the Edwards Hotel, Wednesday noon, and a tea was given at the home of Mrs. W. R. Wright, North State Street, Wednesday afternoon from 4 to 6 P. M.

Tuesday afternoon the executive board convened in the directors room at the Robert E. Lee Hotel. Mrs. W. C. Pool presided with eight members present.

Thursday morning, at the last session, Mrs. Frank L. Van Alstine, Jackson, assumed the office of president, with the following elected as the other officers for the coming year: Mrs. Henry Boswell, Sanitorium, president-elect; Mrs. W. C. Pool, Cary, first vice-president; Mrs. James M. Acker, Jr., Aberdeen, second vice-president; Mrs. Leon S. Lippincott, Vicksburg, third vice-president; Mrs. C. E. Mullins, Bude, fourth vice-president; Mrs. Adna G. Wilde, Jackson, recording secretary; Mrs. E. C. Parker, Gulfport, treasurer; Mrs. J. W. D. Dicks, Natchez, historian, and Mrs. Dan J. Williams, Gulfport, parliamentarian.

A MESSAGE FROM OUR RETIRING PRESIDENT Friends and Co-Workers in the Woman's Auxiliary:

We have come to the parting of the ways, where the sign post points backward over the highway '32-'33.

The receding road has been over the hill of difficulty, around the rocks of failures, but with long stretches of smooth highways with long vistas of the delightful valleys of friendship to gladden the eye and make happy the heart.

As your leader, the journey has been one of delight. At times we seemed to have failed, some cherished scheme has gone awry, but the road has ever led onward and upward to new delights for the success of our beloved Auxiliary.

The organization of the new auxiliaries is an inspiration to any one and especially to one who is as interested in the Auxiliary as your humble leader.

Each auxiliary, new, revived and of long standing is doing splendid work and with such a group of women as the doctors' wives of Mississippi, I feel sure we are just entering a year when much will be gained for the auxiliary and that the acquaintances, fellowship and unity of the organization will be greatly increased.

I thank each one of you for your thoughtfulness and splendid cooperation and I beg of you to continue to give your new leader, who is so capable, the same. I thank you.

Mrs. W. C. Pool.

Jackson,
May 10, 1933.

WOMAN'S AUXILIARY TO THE HOMOCHITTO VALLEY MEDICAL SOCIETY

The April meeting of the Woman's Auxiliary to the Homochitto Valley Medical Society was held at White's Cafe, Natchez, Thursday, April 13. The ladies entertained the doctors at luncheon with readings, dancing and negro spirituals, all local talent.

We are proud of the cooperation we get not only in the organization but by interested outsiders.

After the social hour the doctors remained for their program, while the ladies adjourned to the

home of Mrs. McDonald Watkins for their business meeting. Fifteen members were present.

Meeting called to order by Mrs. Mullins, president. Minutes of last meeting were read and approved.

Two new members were welcomed, making our paid up membership 22 in all.

Delegates to the state convention were Mrs. Dicks, Mrs. Mullins, and Mrs. Stowers, with Mrs. Gaudet, councilor for eighth district.

The July meeting will be held at the home of Mrs. Lewis, Fayette.

No further business to come before the auxiliary, motion was made to adjourn.

Mrs. Wm. Stowers,
Secretary.

Natchez,
May 6, 1933.

JACKSON NEWS

Dr. and Mrs. A. G. Wilde spent a few delightful days in New Orleans on a pleasure trip, the week of April 21.

Mrs. Henry Boswell of Sanatorium returned today from Oxford, where she was called by the illness and death of her father, J. M. Sanders.

The daughter of Dr. and Mrs. J. W. Barksdale, Mrs. Geo. Vinsohaler, Little Rock, is recovering nicely from an appendicitis operation.

The mother of Dr. Henry Boswell, Mrs. J. W. Boswell, died at the home of her son May 4, after an illness of several weeks. Mrs. Boswell was 71 years old.

Mrs. Lauch Hughes.

Jackson,
May 7, 1933.

WOMAN'S AUXILIARY TO THE ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY

The May meeting of the Woman's Auxiliary to

the Issaquena-Sharkey-Warren Counties Medical Society will be held Tuesday, May 16, at its regular 12 o'clock luncheon, in the Coral Room, Hotel Vicksburg, Mrs. Sidney Johnston, president, presiding.

Mrs. Arthur B. McGlothlan, St. Joseph, Missouri, immediate past president of the Woman's Auxiliary to the American Medical Association, will be present, and will be called on for an address.

The regular program for this meeting is Child Welfare, Mrs. H. H. Haralson, leader. Mr. Frank C. Wilcoxon, general secretary of the Vicksburg Y. M. C. A. will speak on this subject.

HONOR ROLL

The thanks of your editors go to the following who have aided by furnishing material for this issue of our Journal:

COUNTY EDITORS: W. F. Hand; S. B. McIlwain; E. S. Bramlett; W. B. Dickins; G. S. Bryan; E. M. Murphey; G. H. Wood; R. P. Donaldson; E. L. Walker; N. B. Lewis; J. G. Archer; S. E. Field; M. L. Montgomery.—13.

SOCIETIES: East Mississippi Medical Society, T. L. Bennett; Harrison-Stone-Hancock Counties Medical Society, E. A. Trudeau; Winona District Medical Society, E. W. Holmes; Coahoma County Medical Club, V. B. Harrison; Mississippi State Hospital Association.—5.

HOSPITALS: Mississippi Baptist Hospital, L. W. Long; Vicksburg Sanitarium; Newton Infirmary, Mrs. S. Kemp.—3.

WOMAN'S AUXILIARY: Mrs. Leon S. Lippincott; Mrs. F. L. Van Alstine; Mrs. W. C. Pool; Mrs. W. K. Stowers; Mrs. Lauch Hughes.—5.

OTHERS: J. M. Acker, Jr.; T. M. Dye; L. L. Minor; M. W. Robertson; J. E. Green; D. J. Williams; E. F. Howard; F. J. Underwood; R. N. Whitfield.—9.

GRAND TOTAL.—35.

BOOK REVIEWS

The Medical Secretary: By Minnie Genevieve Morse. New York. The MacMillan Co., 1933. pp. 162. Price, \$1.50.

The problems which confront the "nurse-secretary" in the doctor's office are interestingly discussed in this small volume. The book is written in the realization of the "difficulties of both the nurse without secretarial training and the secretarial school graduate without medical education, on assuming the duties of office assistant to a doctor".

The author speaks from an experience of "ten years as a medical secretary and nine as a member of the executive staff of a general hospital, three of the latter having included the training of young women for hospital record room work."

The routine of office procedures is discussed at some length, including medical correspondence, bills, reports and case records, medical indexing and filing.

The latter portion of the book treats of medical terminology in a simplified form, which should be of great value to one untrained in medical work. Two chapters only are devoted to medical research and the preparation of medical manuscripts. The reviewer feels that these sections might advantageously be enlarged to greater length. The care and use of the doctor's personal library should be discussed as well as the facilities of organized research services, of which the physician may avail himself. The lending service of the Army Medical

Library through a local institution, should be of interest to the medical secretary; and more detailed information as to medical indexes and their use would be worth-while.

The book is so valuable for what it contains, the reviewer cannot but feel that the hope of greater inclusion in subsequent editions is justified.

MARY LOUISE MARSHALL.

Clinical Endocrinology of the Female: By Charles Mazer, M. D., F. A. C. S. and Leopold Goldstein, M. D. Philadelphia, W. B. Saunders Co. 1932. Illus. pp. 519. Price, \$6.00.

The authors present in a very thorough manner the subject of endocrinology of the female, emphasizing that part which deals with the physiology of the sexual organs. They give an excellent review of this subject in a very clear and understandable manner. It is easily readable, and those cases which are offered with their results are presented in a most complete fashion. Their results will be most enlightening to one who is especially interested in this subject.

Of especial interest to me are the chapters devoted to the treatment of menstrual disorders, and also the chapters describing the clinical test for the blood hormones, and the hormone test for pregnancy.

This book will be received with enthusiasm by the person who is especially interested in this field, and will serve as an excellent reference book.

The authors perhaps have been a little too optimistic in their conclusions, but this may be explained because of the enthusiasm which one is prone to exhibit after working with such a fascinating and attractive.

C. GORDON JOHNSON, M. D.

Chronic Arthritis and Fibrositis, Diagnosis and Treatment: By Bernard Langdon Wyatt, M. D., F. A. C. P., Baltimore, William Wood & Company. 1933. pp. 201. Price, \$3.50.

Every method of differential diagnosis and of therapy that is of practical value has been embodied in this excellent volume.

Early diagnosis, and a discussion of the preventive measures as a means of combatting the frightful morbidity and disability of chronic rheumatism give Dr. Wyatt's book a unique tone. Attention to teeth and tonsils as foci of the greatest importance in the consideration of the etiology of arthritis, and a complete understanding of the role that dampness plays in the causation of this ailment should make this work of great interest to the general practitioner. It is the general practitioner who is first consulted by the rheumatic patient, and as

the author stresses the importance of early recognition of chronic arthritis, the responsibility of giving sound advice and of instituting a thorough search for infective foci, and eliminating them, rests with him.

The technique of every method of treatment is given in the chapters on therapeutics, and it is interesting to note that the author considers only the intravenous administration of a stock *Streptococcus* vaccine, rejecting the use of boiled milk and killed typhoid organisms.

DUBLEY M. STEWART, M. D.

The Tides of Life: By R. G. Hoskins, Ph. D., M. D., New York, W. W. Norton & Co. 1933. pp. 352. Price, \$3.50.

This delightfully written book is enthusiastically commended to those desiring a survey of modern endocrinology. The style is unusually pleasing, hence its reading is easy. The judicious choice of material to be presented, the presentation of the historical development of facts concerning each endocrine organ, the clear statement of present day conceptions of physiology and their implicit relations to clinical pictures and methods have combined to create an interest in the reader which will make him unwilling to lay the book aside until he has finished it.

I. I. LEMANN, M. D.

The History of Dermatology: By William Allen Pusey, A.M., M.D., LL.D. Springfield, Ill. Charles C. Thomas 1933. Illus. pp. 223. Price, \$3.00.

This work is dedicated to the younger generation by a worker who has always been the friend of the younger generation.

The chapter on early ancient Dermatology of Egypt to Greece, 3000 B.C. to 300 B.C., applies the knowledge gained by translation of the Edwin Smith Papyrus and Papyrus Ebers. The author's knowledge of skin diseases is used to glean these old records and presents to the reader a very authentic, interesting history of early medicine and especially interesting therapeutic procedures of the ancient healers. Wrinkles and baldness were treated in those times with as much success as the results of our modern therapy.

The whole volume is not only a history of a special branch of medicine, but shows the evolution of specialties and the keenness of those who gave order to classification of diseases, methods to diagnosis and system to therapy.

The treatise is very interesting to the casual reader and of extreme interest to the medical profession.

M. T. VAN STUDDIFORD, M. D.

The Physical Basis of Personality: By Charles R. Stockard. New York, W. Norton & Co., Inc., 1931. pp. 320. Price, \$3.50.

This book, from a psychiatric standpoint is one of those that has very little reason for having been written. In some three hundred odd pages of biological discussion, the author establishes facts which are perfectly obvious without all the scientific discussion that he bestows upon it. Possibly as a reference book in a library for any one interested in biology it would be of some service, but certainly from the standpoint of a busy practitioner of psychiatry there is no excuse for its existence.

E. McC. CONNELLY, M. D.

Possibilities and Need for Development of Legal Medicine in the United States: By Oscar T. Schultz. National Research Council Bulletin No. 87. pp. 135. Price, \$1.50.

This report of the National Research Council as regards the possibility and need for the development of legal medicine in the United States is a timely one. It has evidently been compiled with great caution and painstaking effort.

There is a foreword, well constructed, which is self-explanatory. The chapters are eleven (11) in number, each containing essential reading matter, necessary and instructive, regarding the topics contained therein. There are comparisons of medico-legal institutes and situations between this country and Continental Europe, likewise medical science and law in the United States.

A constructive criticism of the Coroners office is worth reading, likewise the interpretation of the office of Medical Examiner. Great stress is laid on the Psychiatric service in criminal law with an especial palm to the Massachusetts system. Later there follows an explanation of the application of Psychiatry to law which is most needed in these times of our civilization. Neuropsychiatrists have no fault to find with legal procedure. It has been conceded, though, that in a number of cases, it is an asset and can likewise be an aid to legal procedure in solving many of the problems where there is a question of the prisoners' status of being held accountable for his acts.

Expert testimony is touched upon in a sensible manner. Police science has a share in this bulletin which should be given much consideration in our present system of police commissions and departments, especially referable to the selection of the individuals from all fundamental standards to his placement in these specific groups.

In a later paragraph, the relation of State University and Legal Medicine is summarized, naming the States in which this is done therein. Science and the prevention of crime is given an analytical

outlook for the future. There is a summary worth reading with a supplement dealing with the University in the field of criminology wherein these activities are established in the Department of Police Administration and Police Study.

This volume is well written with reference that stand-apart in the medico-legal word of today. It should be an asset in collateral reading to Coroners, Police Juries and Commissioners, as well as Neuropsychiatrists and Physicians who are acting Coroners. Judges, too, may well read this for their information and guidance, which would be an aid in solving some of their problems and problem cases dealing with abnormal, anti-social and unmoral conduct reactions.

WALTER J. OTIS, M. D.

Criteria for the Classification and Diagnosis of Heart Disease, by the Criteria Committee of the Heart Committee of the New York Tuberculosis and Health Association, Inc. 3d. ed. New York, N.Y. Tuberculosis and Health Association, 1932. pp 131.

This small work has already become a classic in its field. This edition is a revision based on new concepts and trends in cardiology. In addition there are now added new chapters devoted to x-ray and electrocardiography. This addition is of the same excellence as the other sections of the book.

I. L. ROBBINS, M. D.

International Clinics: Vol. 1, 1933. Philadelphia, J. B. Lippincott, 1933. pp. 305. Pl. illus. Price, \$3.00.

This splendid volume is a worthy acquisition to medical literature. The choice of articles and the quality of their content merit consideration and praise. The departments of medicine, surgery and neurology are well represented. The clinical pathologic conference is splendid and the recent progress in medicine and surgery deserve much commendation. Space does not permit a discussion of the several articles,—but suffice it to say time may well be spent in this book, replete with modern information.

I. L. ROBBINS, M. D.

Asthma, Hay Fever and Related Disorders: A Guide for Patients. S. M. Feinberg, M. D., F. A. C. P. Philadelphia. Lea and Febiger, 1933 pp. 124. Price \$1.50.

The author carries out his purpose very well in publishing this guide. While it is primarily a manual for the laity, many physicians as well as medical students may profit materially by reading it. It is very easily understandable, and the known facts about Allergy are succinctly explained.

B. GELFAND EFRON, M. D.

How to Budget Health: By Evans Clark. New York, Harper & Brothers, 1933. pp. 327.

The average person in the United States loses one week every year because of illness. The amount he spends for medical care ranges from \$25 to \$50 for himself, or \$100 to \$200 for his family (of four). These averages are made up of widely divergent amounts paid by different individuals. The average doctor's net income is not more than \$5000. Each year he does about \$1000 worth of free work, which means that he gives away the equivalent of two months labor. In the present system of medicine he works on a sliding scale of charges. Both doctor and patient are frequently dissatisfied for errors result in two directions. Sometimes the doctor offends by charging too much, sometimes he cheats himself out of a just fee and embarrasses his patient.

The cost of medical care with the tribulations of the middle class patient is a paramount problem at the moment. The voluminous report of the Committee on the Costs of Medical Care attests to its complicity. The author of this work was an active worker on that Committee. He advocates a medical guild plan which promises to avert the twin threat of state and industrial medicine. Not fool proof, criticized by another reviewer because "it fails to appreciate the basic importance of the individual relation of doctor to patient," his plan is well presented, clear, tangible and practical.

MAURICE SULLIVAN, M. D.

Papers Relating to the Pituitary Body, Hypothalamus and Parasympathetic Nervous System: By Harvey Cushing, Springfield, Ill. Charles C. Thomas, 1932. pp. 234. Price \$5.00.

This small volume consists of four sections, the first, Neurohypophyseal Mechanisms from a Clinical Standpoint, takes up consideration of the pituitary body and gives a complete review of the entire question in the light of present day knowledge together with speculation based largely on anatomical and physiological grounds. Not only is the pituitary body itself covered but there is detailed consideration of the many clinical pictures seen in connection with pituitary disease which may be associated with involvement of centers and structures in the region of the pituitary fossa or directly connected therewith as diabetes insipidus, adiposity, heat control, carbohydrate metabolism, pathological sleep etc. together with clinical correlations. The extent of the influence of the pituitary region is widespread indeed—"here in this well concealed spot—almost to be covered by a thumbnail—lies the very mainspring of primitive existence—vegetative, emotional, reproductive—on which with more or less success man has come to superimpose a cortex of inhibitions. The symptoms arising from disturbances of this ancestral apparatus are begin-

ning to stand out in their true significance. That the older literature proves to be filled with reports of cases as telling as any of those cited herein goes to show that we have advanced no whit in powers of observation, merely that modern science has permitted us to give to them revised interpretations.***Thus Willis said of that 'divine artifice' the rete mirabile and its function 'There is nothing in the whole fabric of an animal body more worthy of admiration *** nothing can be conceived as more skillful and nothing which argues more forcefully the providence of a Divine Author'".

The second paper is concerned with the posterior pituitary hormone and the parasympathetic nervous system. It is the author's answer to a challenge from an anatomist to show clinical or experimental evidence of posterior lobe activity. This he proceeds to do through some fifty pages. There are definite physiological responses to intraventricular injection of pituitrin which apparently acted directly upon central structures and a very similar reaction accompanies the intraventricular injection of pilocarpine. Atropine is an antidote for both. Experiments tend to show that these effects are due to action on the hypothalamic nuclei rather than on the peripheral apparatus.

They are abolished in certain conditions by avertin which is supposed to act on the interbrain. Further investigation indicates that the effects produced were actually due to pituitrin and not to some other active drug contained in the preparations used.

The third paper deals with the basophilic adenomas of the pituitary or pituitary basophilism. Pituitary adenomas are divided histologically on the basis of their staining properties into two principal types; those with nongranular cytoplasm (chromophobe) and those with granular cytoplasm (chromophil) and of the latter there are two kinds—acidophil and basophil. The basophil adenomas are characterized by painful obesity, hypertrichosis and amenorrhoea with overdevelopment of secondary sex characteristics. They may also show spinal kyphosis from decalcification, hypertension, polycythemia and cutaneous pigmentation especially purplish striae on the rapidly stretched skin over the abdomen. Glycosuria is frequent. The obesity tends to spare the extremities and is marked in the body, neck and head. Sixteen cases are reported in detail; of ten autopsies six were verified and in two others the adenoma was undifferentiated, in two more the gland was said to be normal but probably was not sectioned serially. Some cases were treated by roentgen therapy and the author concludes that the most effective treatment can be left to future experience.

The fourth thesis is the well known Balfour Lecture of 1931 given at the University of Toronto and taking for its theme the neurogenic influence

on gastric, and duodenal ulcers and some allied conditions. Strong proof is marshalled to support such an hypothesis from both his own experiences and those of others. The theory which is by no means new is elaborated with Dr. Cushing's usual clarity and force.

That these four lectures have been made available in one volume is indeed gratifying and stimulates the reviewer to repeat the expressed wishes of many others that all contributions from that famous clinic may be collected and published together.

GILBERT ANDERSON, M. D.

The Duodenum: Its Structure and Function, Its Diseases and Their Medical and Surgical Treatment: By Kellogg, Edward L. New York, Paul B. Hoeber, Inc., 1933. Illus. pp. 671. Price 10.00.

In fulfillment of its amplified title this monograph portrays the manifold data, both fundamental and clinical, concerning the duodenum. Concise expositions are made of embryology, anatomy, physiology, and bacteriology with frequent correlation to clinical manifestations. Pathology is discussed in detailed descriptions of the various duodenal lesions and syndromes.

Methods of examination, descriptions of apparatus and accessories, and discussion of interpretation of findings by special procedures are clearly presented. The author feels that through proper application and correct interpretation, the string or braid test can yield much valuable information. A. Judson Quimby has written the section on x-ray diagnosis.

The chapter on duodenal parasites, contributed by Bailey K. Ashford, contains information of interest particularly to Southern doctors. Infestation with strongyloides is shown sometimes to result in definite lesions and symptoms, thus disproving the opinion held by many that these parasites are innocuous. The newer anthelmintics, including gentian violet and di-hydranol, are discussed and results obtained with them presented.

There are well arranged chapters on anomalies of shape and position of the duodenum, duodenitis, diverticulosis, duodenal injuries and fistulae, duodenal obstruction and duodenal ulcer, as well as less common duodenal lesions and syndromes. These subjects are thoroughly discussed, including details of medical treatment or indications for surgical intervention. In a chapter entitled "Duodenal Diabetes", reference is made to the experimental work of Pflüger and others on the production of by duodenectomy, denervation of the duodenum or destruction of the duodena mucosa. The author cites his own observations of the association of glycosuria with x-ray evidence of duodenal deformity and delay. He is inclined to feel that in

certain cases the pancreatic lesion in diabetes is secondary to duodenal stasis and infection.

The occurrence of acute and chronic duodenal obstruction through other mechanisms than compression by the superior mesenteric vessels is well shown by both descriptive and pictorial representation of duodenal ileus resulting from congenital and acquired adhesions or bands, aberrant vessels, malrotation of abdominal viscera, abnormal mobility of the duodenum, coloptosis, gastropptosis, duodenal intussusception and hernia, congenital and acquired stenosis, annular pancreas, foreign bodies, neoplasms, and following gastro-enterostomy.

Many case reports, some from the author's own experience, statistical tables, and personal observations add to the impressions gained from the text. The last chapter is devoted to detailed descriptions of surgical procedures and, in keeping with the rest of the book, is well illustrated. Attention is drawn to the common error of mistaking the duodenomesocolic fold for the suspensory muscle or ligament of Treitz, which latter is in part definitely muscular.

In addition to the 671 pages of text proper, there is an extensive bibliography and an index of proper names and subjects.

Even those who are well informed on present data concerning the duodenum will find this volume well worth reading and valuable as a reference book.

AMBROSE H. STORCK, M. D.

Bailey's Text-Book of Histology: By Adolph Elwyn, A. M., Oliver S. Strong, A. M. Ph. D. and five collaborators. Baltimore, William Wood & Company, 1932. pp. xvi-746, figs. 529. Price \$5.50.

The eighth edition of this standard text of histology presents many features, both in content and method of treatment, differing from the preceding issues. A large share of the book is rewritten, five newly enlisted collaborators, all members of the staff of anatomy at the College of Physicians and Surgeons, having contributed to the revision. Perhaps the most notable improvement is the extensive treatment of functional histology, the correlation of structure and function. The new chapter dealing with the living cell, as observed in tissue culture, as subjected to microdissection etc., is commendable, its addition being representative of the functional point of view characteristic of other revised chapters. Though previous editions carry an elaborate neuroanatomical section, the authors have now wisely chosen to limit these chapters to materials commonly presented in histology texts. Expansion of the deleted

material into a text of neuroanatomy is anticipated, and in the meantime the publishers are to reprint separately the entire section on the nervous system from the seventh edition.

HAROLD CUMMINS, Ph. D.

Clinical Diagnosis, Physical and Differential: By Newton S. Stern, A. B., M. D., New York. The MacMillan Company, 1933. pp. 364. Price \$3.50.

The author states in the introduction that he has attempted properly to emphasize "the art of diagnosis as a whole" by stressing particularly the significance of symptoms. It is in this respect that the book is different, and this method of presentation is the thing that makes it attractive and useful.

Following a section on the usual technic of history taking and physical examination, which is clear, concise, complete and well arranged, there is a part on the symptoms and signs in tuberculosis and heart disease. Under each type of cardiac pathology the characteristic signs, necessary for a diagnosis, are tabulated.

The most interesting and unusual section is the chapter on "The Technique of Making a Diagnosis". This consists of an explanation of the manner in which data should be analysed and studied in order to make a diagnosis. Included are a series of case histories for practice.

There then follows a list of important signs and symptoms alphabetically arranged, with definition, explanation of method of production, and the conditions which may produce it. There are about one hundred such listed.

In the opinion of the reviewer this text should be a useful addition in the teaching of clinical medicine and physical diagnosis.

WILLARD R. WIRTH, M. D.

Lincoln and the Doctors: A Medical Narrative of the Life of Abraham Lincoln. By Milton H. Shutes, M. D., New York, The Pioneer Press, 1933, pp. 152.

The author has collected, with painstaking care, every bit of information possible about the various contacts with physicians that President Lincoln had and brushes over some of the ills of his immediate family. He presents with charm not only the prosaic medical life of Lincoln, but also draws a hasty sketch of many of the physicians with whom Lincoln dealt.

Lincoln's medical history is of considerable interest. The depressed, anxious look which was habitually on the face of the president apparently was due in considerable part to the fact that Mr. Lincoln was a marked hypochondriac. Despite this constitutional weakness of his emotions he was able to conquer his periodic periods of de-

pression whenever crises arose. He was a sufferer from chronic constipation and it has been suggested that on account of his rather remarkable build he might have suffered from pituitary dysfunction. His left eye had apparently a deviation upward, which might have been responsible in part for his sad facial expression. He also suffered from corns and calluses. An account of the death of Lincoln from the medical standpoint is included in the book, as well as the autopsy findings.

In spite of the frequency with which Mr. Lincoln consulted quacks and second-rate practitioners throughout his life and in spite of the very slight amount of scientific knowledge he demanded of his personal physician, and there were many of them, he did have enough common sense about medicine to have as family physician Doctor Stone, who at this time was one of the most distinguished and prominent physicians in this country. Lincoln was perfectly willing to chance any stray practitioner or to feed himself patent medicines galore, but he was not willing to let his family face such hazards as would follow unscientific medication.

J. H. MUSSER, M. D.

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